



2022 Transit Asset Management Plan



Document Control History

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A	9/28/2022	2022 WeGo Transit Asset Management Plan. Complete update of the 2018 TAM Plan.

Agency Self-Certification

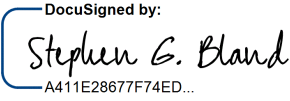
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Chapter 1

INTRODUCTION AND BACKGROUND

A Transit Asset Management Plan (TAM Plan) is a strategic and systematic planning tool to manage transit capital assets based on careful planning and improved decision-making. It is required of all providers by the Federal Transit Administration (FTA). A TAM Plan uses transit asset condition to guide how to manage capital assets and prioritize funding to improve or maintain the overall transit fleet and facilities to a target level of State of Good Repair (SGR). The FTA defines State of Good Repair as “the condition in which an asset is able to operate at a full level of performance” (49 CFR § 625.5). A TAM Plan is essentially a business model that evaluates asset condition to develop a prioritized asset replacement strategy. This document is the first update to WeGo Public Transit’s (WeGo) original 2018 TAM Plan.

1.1. WEGO PUBLIC TRANSIT

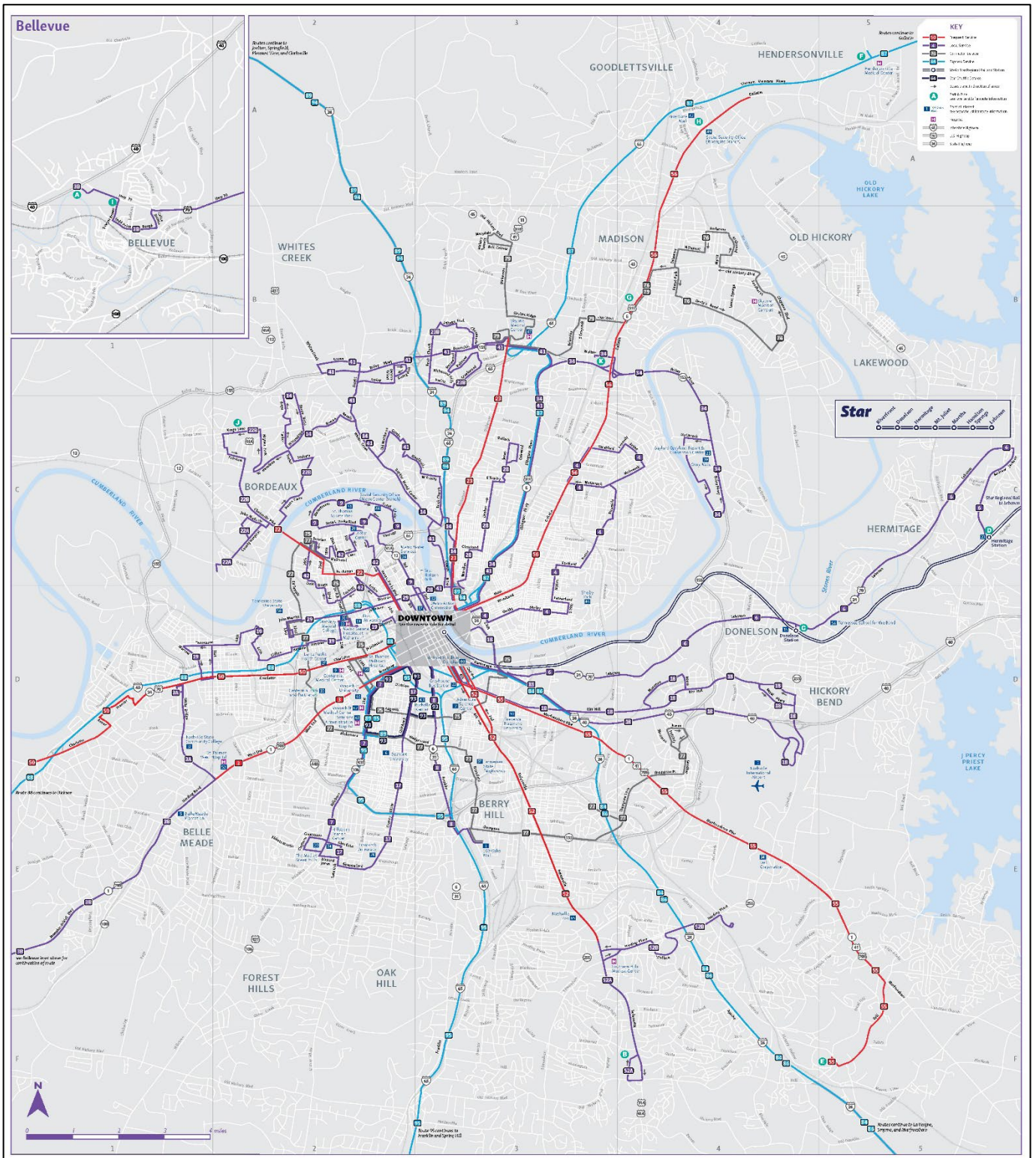
The Nashville Metropolitan Transit Authority (MTA), doing business as WeGo Public Transit, is the public transit provider for Metro Nashville-Davidson County, Tennessee. This document uses the agency’s public-facing name for MTA and Regional Transportation Authority of Middle Tennessee (RTA), “WeGo,” to refer to MTA. WeGo directly operates fixed-route bus and Access service, complementary demand-response service for people with disabilities who are unable to use fixed-route bus service. Both fixed-route and Access paratransit service are operated countywide.

The WeGo Board of Directors is a five-member panel appointed by the Mayor of Metro Nashville-Davidson County and approved by the Metro Council. The Board sets policies regarding the operation of the WeGo. WeGo management oversees the day-to-day operation of the agency in accordance with the Board’s direction. Figure 1 shows the organizational chart of the agency, and Figure 2 provides a map of WeGo’s fixed route service.

Figure 1: Organizational Chart for WeGo Public Transit



Figure 2. WeGo Public Transit's Fixed Route Service Map



Source: WeGo Public Transportation. March 17, 2022.

1.2. POLICY CONTEXT OF THE TAM PLAN

The requirements for a TAM plan fit within the overall context of transportation planning and the emphasis on performance planning that was established by MAP-21. Table 1 lists eight topic areas for performance planning as mandated by MAP-21 and carried forward by the FAST Act and the Infrastructure Investment and Jobs Act (IIJA). The development of a TAM plan is just one of the linked planning efforts to be developed under the FTA and the Federal Highway Administration (FHWA).

Table 1. FTA-Required Performance Planning

FTA	FHWA
National Public Transit Safety Plan	Highway Asset Management Plan
Transit Asset Management Plan	Pavement and Bridge Condition
Public Transportation Agency Safety Plan	Safety Performance
	Highway Safety Improvement Plan
	System Performance and CMAQ

The FTA Final Rule, published as 81 FR 48889, later codified as 49 CFR § 625, carries out the mandate of 49 USC § 5326 for transit asset management.

“The Federal Transit Administration is publishing a final rule to define the term state of good repair and to establish minimum Federal requirements for transit asset management that apply to all recipients and subrecipients of chapter 53 funds that own, operate, or manage public transportation capital assets. This final rule requires public transportation providers to develop and implement out transit asset management (TAM) plans. TAM plans must include an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the state of good repair of their capital assets. This final rule also establishes state good repair standards and four state of good repair (SGR) performance measures. Transit providers are required to set performance targets for their capital assets based on the SGR measures and report their targets, as well as information related to the condition of their capital assets, to the National Transit Database.”

The four-year cycle for TAM plan updates was specifically designed to coincide with the cycle for State Transportation Improvement Programs (STIPs) and the Metropolitan Planning Organizations’ Transportation Improvement Programs (TIPs). The Final Rule for Metropolitan Transportation Planning, issued in the Federal Register on May 27, 2016, indicated that states, MPOs, and local transit agencies are required to coordinate with one another in setting State of Good Repair targets for the TAM plan. In Middle Tennessee, the several transit agencies, the MPO (Greater Nashville Regional Council (GNRC)), and the State jointly adopted a Memorandum of Understanding (MOU) committing to such coordination:

“In support of a performance-based approach to the metropolitan planning process, MTA, RTA, FTA, and the City of Murfreesboro Transportation Department will develop targets for transit performance measures in accordance with 49 CFR 625 – Transit Asset Management, and will share information and coordinate with the MPO regarding transit system condition, development methodology for targets, and investment priorities and strategies. MTA and RTA will share targets annually with the MPO. The MPO shall select performance for its metropolitan planning area in coordination, to the maximum extent practicable, with MTA and RTA.”

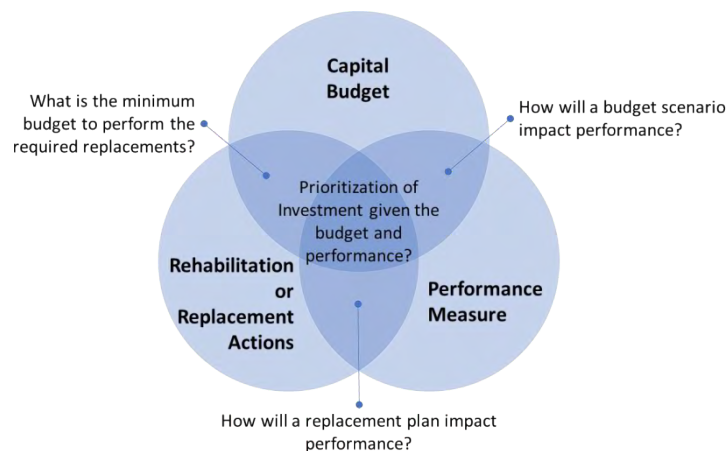
1.3. THE PURPOSE OF A TRANSIT ASSET MANAGEMENT PLAN (TAM PLAN)

WeGo has a wide variety of capital assets to operate and maintain, including revenue vehicles, non-revenue service vehicles, equipment, and facilities. WeGo, as a steward of these assets and provider of transit service to the public, must maintain, rehabilitate, and replace these physical assets to sustain a State of Good Repair (SGR) at the agency and to provide reliable, safe service to passengers. This TAM plan provides a set of tools and an overall investment framework to guide WeGo in managing its assets, in prioritizing its capital investment, and in achieving and maintaining SGR. The TAM Plan informs the more specific capital investment programs that are approved by the WeGo Board of Directors annually.

A TAM plan is built upon certain fundamental questions a transit provider needs to answer when planning their capital investment. The interrelationship of these questions is illustrated in Figure 3. These questions are:

- What level of funding needed to achieve SGR targets?
- How would higher or lower levels of funding impact attainment of SGR targets?
- How will SGR impact operational performance?
- How should projects be prioritized to achieve the highest overall SGR? Which assets should be replaced or rehabilitated first, and why?

Figure 3: Elements of an SGR Framework to Prioritize Asset Replacement¹



¹ TCRP Report 157, “State of Good Repair: Prioritizing the Rehabilitation and Replacement of Existing Capital Assets and Evaluating the Implications for Transit,” Transportation Research Board (TRB), Sponsored by FTA, 2012.

WeGo relies heavily on its asset inventory, asset condition assessments, current performance metrics, and budgetary data to answer these questions. Having accurate, comprehensive data is a pillar of a successful transit asset management planning.

The TAM Plan is meant to be a strategic management plan that will help WeGo maintain assets in SGR, which, in turn, supports the following:²

- **Improving Stakeholder Communications:** by providing more accurate and timely data-driven knowledge that can be used in decision-making process; by providing current and forecasted performance indicators that illustrate the outcomes of investments and decisions.
- **Improving Customer Service:** by improving on-time performance and service operations; vehicle and facility conditions, reduce delays due to failures; focusing investments around customer-centered objectives.
- **Improving Cost Effectiveness:** by preserving and maintaining assets more effectively; utilizing preventive and predictive strategies to invest more efficiently.
- **Optimizing Resource Allocation:** by aligning investments with the agency's overall goals and objectives as well as agency's TAM goals and objectives; focusing on return of investment (ROI) by incorporating lifecycle costs, risk, and trade-off analyses.

These are considered the “drivers” of TAM practice at WeGo and are illustrated in Figure 4.

Figure 4: Drivers of TAM Practices



² “Creating a Transit Asset Management Program,” American Public Transportation Association (APTA), Recommended Practice #APTA-SGR-TAM-RP-001-13, August 2013.

1.4. COMPLIANCE WITH 49 CFR PART 625

FTA requires WeGo to update its TAM Plan every four years. 49 CFR 625 also indicates that “A provider should amend its TAM plan whenever there is a significant change to the asset inventory, condition assessments, or investment prioritization that the provider did not reasonably anticipate during the development of the TAM plan.” In addition, since 2018 FTA has required WeGo to submit an annual Asset Inventory Module (AIM) and narrative reports to the FTA’s National Transit Database (NTD), which must include updated information on:

- Condition assessments and analysis of asset performance.
- A narrative report on changes in the fleet’s condition and the progress made toward achieving the annual targets.
- Targets for the next fiscal year.

1.5. CLASSIFICATION OF TRANSIT PROVIDERS

49 CFR § 625 outlines the requirements for the TAM plans. Requirements differ for two “tiers” of transit providers. The defining characteristics of each tier are summarized in Table 2 below. Based on this classification, the WeGo is a Tier I provider.

Table 2. Defining Characteristics of Tier I and Tier II Transit Providers

Tier I Transit Providers	Tier II Transit Providers
<ul style="list-style-type: none"> ■ Operate rail ■ Own, operate, or manage 101 or more vehicles in revenue service during peak regular service across all fixed route mode of transportation ■ Own, operate, or manage 101 or more vehicles in revenue service during peak regular service in one non-fixed route mode of transportation 	<ul style="list-style-type: none"> ■ Own, operate, or manage 100 or less vehicles in revenue service during peak regular service across all non-rail fixed route modes ■ Own, operate, or manage 100 or less vehicles in revenue service during peak regular service in any one non-fixed route mode ■ Are a subrecipient under the Section 5311 Rural Area Formula Program ■ Are an American Indian tribe

1.6. TAM PLAN CONTENT REQUIREMENTS

The required contents of TAM plans for Tier I agencies are summarized in Table 3 below. The table also provides a “crosswalk” between the FTA-required elements and the relevant chapter of this TAM plan. Appendix A provides a checklist for compliance with the FTA Final Rule.

Table 3. FTA TAM Plan Requirements³ and Relevant WeGo TAM Plan Chapters

Requirements	Description	Chapter of WeGo TAM Plan
1. Inventory of Capital Assets	A register of capital assets and information about those assets.	Chapter 3 – Asset Inventory and Condition Assessment
2. Condition Assessment	A rating of the assets' physical state; to be completed for assets an agency has direct capital responsibility for; should be at a level of detail sufficient to monitor and predict the performance of inventoried assets	Chapter 3 – Asset Inventory and Condition Assessment
3. TAM and SGR Policy	A TAM policy is the executive-level direction regarding expectations for transit asset management; a TAM strategy consists of the actions that support the implementation of the TAM policy	Chapter 1 – Introduction (Vision, Policies, and Goals) Chapter 2 –Self-Assessment: TAM Plan Implementation 2018-2022 Chapter 4 – State of Good Repair and Performance Targets
4. Decision Support Tool	An analytic process or tool that (1) assists in capital asset investment prioritization and/or (2) estimates capital needs over time (does not necessarily mean software)	Chapter 5 – Asset Prioritization and Decision Support Tool
5. Investment Prioritization	A prioritized list of projects or programs to manage or improve the SGR of a capital asset	Chapter 6 – Capital Budget and Investment Prioritization
6. Implementation Strategy	The operational actions that a transit provider decides to conduct, in order to achieve its TAM goals and policies	Chapter 7 – TAM Implementation Strategy & Key Activities
7. List of Key Activities over Plan Horizon Period	The actions needed to implement a TAM plan for each year of the plan's horizon	Chapter 7 – TAM Implementation Strategy & Key Activities
8. List of Resources for TAM Plan	A summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM plan	Chapter 7 – TAM Implementation Strategy & Key Activities
9. Evaluation and Monitoring Plan	An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure the continuous improvement	Chapter 8 – Monitoring & Continuous Improvement Plan

1.7. SUCCESSFULLY DEVELOPING AND IMPLEMENTING THE TAM PLAN

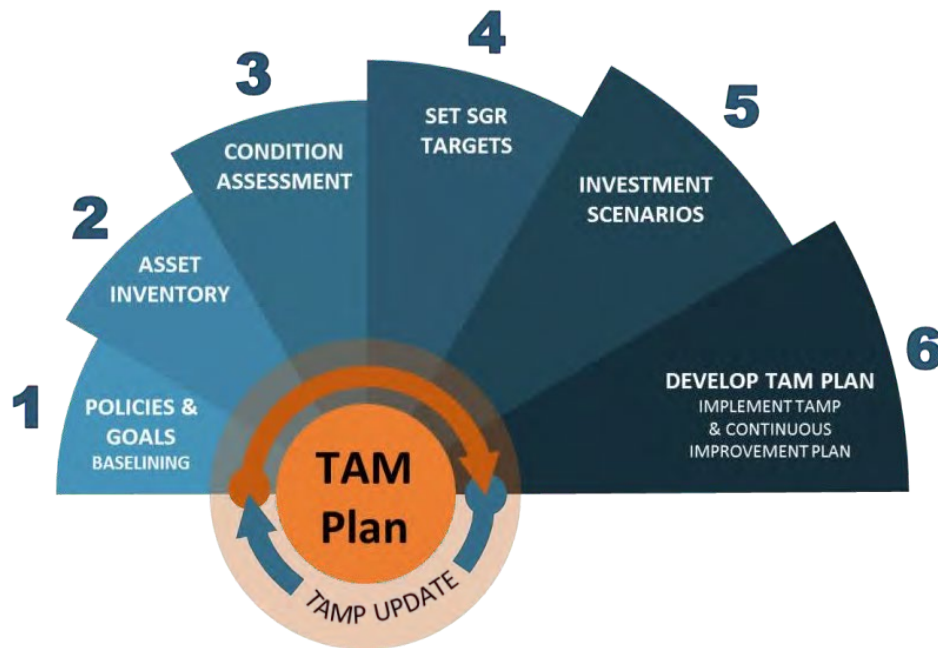
Table 4 lists some of the characteristics of what a TAM plan is intended to be, and to not be. A TAM plan is considered effective when it is successfully implemented, is integrated into the decision-making process, and is supported within the agency both vertically and horizontally.

³ Federal Transit Administration. <https://www.transit.dot.gov/TAM/TAMPlans>. Accessed 7/5/2022.

Table 4. Purposes of a Transit Asset Management Plan (TAM Plan)

A TAM Plan is <u>NOT</u> ...	A TAM Plan <u>IS</u> ...
An isolated new planning tool that is unrelated to other planning efforts.	One aspect of coordinated performance-based planning as established in MAP-21 and carried forward by the FAST Act and IJJA.
A simple list of best practices in asset management.	A plan outlining specific steps for WeGo to improve their asset management practices and processes.
A pointless planning exercise with no useful real-world application.	A framework to support decisions for optimized asset management within a given budget scenario.
A reference tool applicable only for the occasional tough decision.	A comprehensive plan supporting all asset management decisions.
A one-time effort to check off Federal requirements.	A foundation for optimizing long-term asset management.
A static plan.	A strategic plan with annual reports on performance targets, progress, and a four-year update cycle.

TCRP Report 172⁴ proposes a framework for developing a TAM plan as a logical, multi-step approach which can be tailored to the needs and size of the transit provider agency. The same approach has been used to develop this TAM Plan. Figure 5 illustrates the relationship between TAM plan elements as envisioned in TCRP Report 172.

Figure 5. Multi-Step Approach to TAM Plan Development

⁴ TCRP Report 172, "Guidance for Developing a Transit Asset Management Plan," Transportation Research Board (TRB), Sponsored by Federal Transit Administration, 2014.

1.8. TIME HORIZON FOR TAM PLAN UPDATE AND DATA SUBMISSIONS

49 CFR §625 established October 2018 as the deadline for developing the first complete TAM plan. The deadlines for all TAM requirements from 2022 to 2026 are listed below in Figure 6.

Figure 6. Schedule for TAM Plan Implementation and Ongoing Updates: 2022-2026

Required Task	Due Date
Complete Updated TAM Plan (2nd TAM Plan) Report FY21 AIM data to NTD Submit SGR targets for FY22 to NTD Submit narrative report to NTD	October 2022
Report FY22 AIM data to NTD Submit SGR targets for FY23 to NTD Submit narrative report to NTD	October 2023
Report FY23 AIM data to NTD Submit SGR targets for FY24 to NTD Submit narrative report to NTD	October 2024
Report FY24 AIM data to NTD Submit SGR targets for FY25 to NTD Submit narrative report to NTD	October 2025
Complete Updated TAM Plan (3rd TAM Plan) Report FY25 AIM data to NTD Submit SGR targets for FY26 to NTD Submit narrative report to NTD	October 2026

1.9. FROM VISION TO PLAN AND STRATEGY FOR TAM

Successful implementation of a TAM practices will require that those practices are embraced agency-wide, supported by both a vision and a set of top-down directions and policies. The vision and these policies should be highly visible and frequently used by the agency's executive leadership team to communicate the importance and the role of TAM practices in meeting the expected level of service objectives. Figure 7 illustrates the hierarchy of vision to strategic plan and continuous improvement for an agency. Vision, policies and goals, if supported by the executive level and adopted across the agency, will create shared understanding, motivation, and coordination among the staff at all levels. Therefore, having a set of solid vision, policies, and goals, is the cornerstone of effective and successful TAM implementation. The following sections outline these for WeGo's TAM practice.

Figure 7. Vision to Strategic Plan Hierarchy

WeGo adopted the following as its TAM vision in 2018 and affirms it in this 2022 Update:

The Transit Asset Management (TAM) Plan has been developed to provide a strategic direction inclusive of roles and responsibilities for the Nashville Metropolitan Transit Authority (WeGo) and its contractors, to maintain its assets in a State of Good Repair (SGR). The plan will emphasize the goal of promoting a culture of asset management at WeGo that will support how the Agency makes decisions and allocates funds for stewardship of transit assets strategically, maximizing the lifecycle of each component to make the best use of constrained resources. These decisions are supported by timely, reliable data, monitored and reviewed regularly, and used many times.

Subsequent chapters of the 2022 TAM Plan will address objectives, resources, implementation, and continuous improvement.

1.10. WEGO TRANSIT ASSET MANAGEMENT POLICIES AND GOALS

This 2022 TAM Plan Update incorporates the TAM policies and goals that WeGo adopted in 2018 with a few revisions based on the agency's experience in implementing TAM. These high-level policies and goals, presented in Table 5, cover multiple aspects of the agency's operation, from setting the policies, to organizational efficiency, fiscal sustainability, human resources, as well as tools, data, and the need for continuous improvement. These policies and goals will be the basis for the TAM implementation strategy provided in Chapter 8.

Table 5. WeGo's TAM Policies and Goals

Focus Area	Policies	Goals
Planning	Provide agency-wide direction, fulfill all FTA requirements, and strive for continuous improvement in asset management practices.	<ul style="list-style-type: none"> ■ Fulfill all FTA planning and reporting requirements per 49 CFR § 625 ■ Ensure that the agency has well-defined vision, policies and goals, and that these are reviewed as part of the continuous improvement plan ■ Align asset management and safety management practices
Efficiency and Safety	Proactively manage assets to improve operational efficiency and safety.	<ul style="list-style-type: none"> ■ Maintain vehicles, equipment, systems, and facilities in a state of good repair ■ Develop and implement asset replacement and rehabilitation plans. ■ Develop and implement programs of preventive maintenance for capital assets ■ Use asset data and subject matter expertise to identify recurring issues, reduce road calls, and move toward a proactive management of assets
Fiscal Sustainability	Foster financial sustainability by implementing asset management and promoting the TAM culture at the agency	<ul style="list-style-type: none"> ■ Preserve current assets while planning for replacement and additions ■ Develop WeGo's annual budgeting process and Capital Investment Plan (CIP) in alignment with SGR targets in this TAM Plan ■ Utilize objective methods to prioritize capital projects ■ Ensure investment decisions are transparent and clearly communicated
Human Capital	Promote asset management culture at WeGo and develop the human capital necessary for TAM implementation	<ul style="list-style-type: none"> ■ Document and manage organizational knowledge and lessons-learned ■ Recruit, develop, and retain well-trained TAM workforce ■ Develop a succession plan for key roles at the agency
Data and Tools	Support data-driven decision-making through the use of analytical tools and reliable data.	<ul style="list-style-type: none"> ■ Collect relevant, timely, and accurate data to support decision-making ■ Develop data management protocols to reduce redundancy while following information security standards ■ Assess and implement tools to support data driven asset management decisions ■ Utilize historical data to identify recurring issues and failures

1.11. TAM ROLES AND RESPONSIBILITIES AT WEGO

FTA requirements call for each provider to designate a single Accountable Executive, who is ultimately responsible for carrying out the TAM plan. For WeGo, the Chief Executive Officer (CEO) of the agency will serve as the Accountable Executive.

WeGo's departments and offices have a shared commitment for developing the TAM Plan, policies and goals, and implementing TAM practices at WeGo. TAM roles and responsibilities within WeGo are outlined below and illustrated in Figure 8.

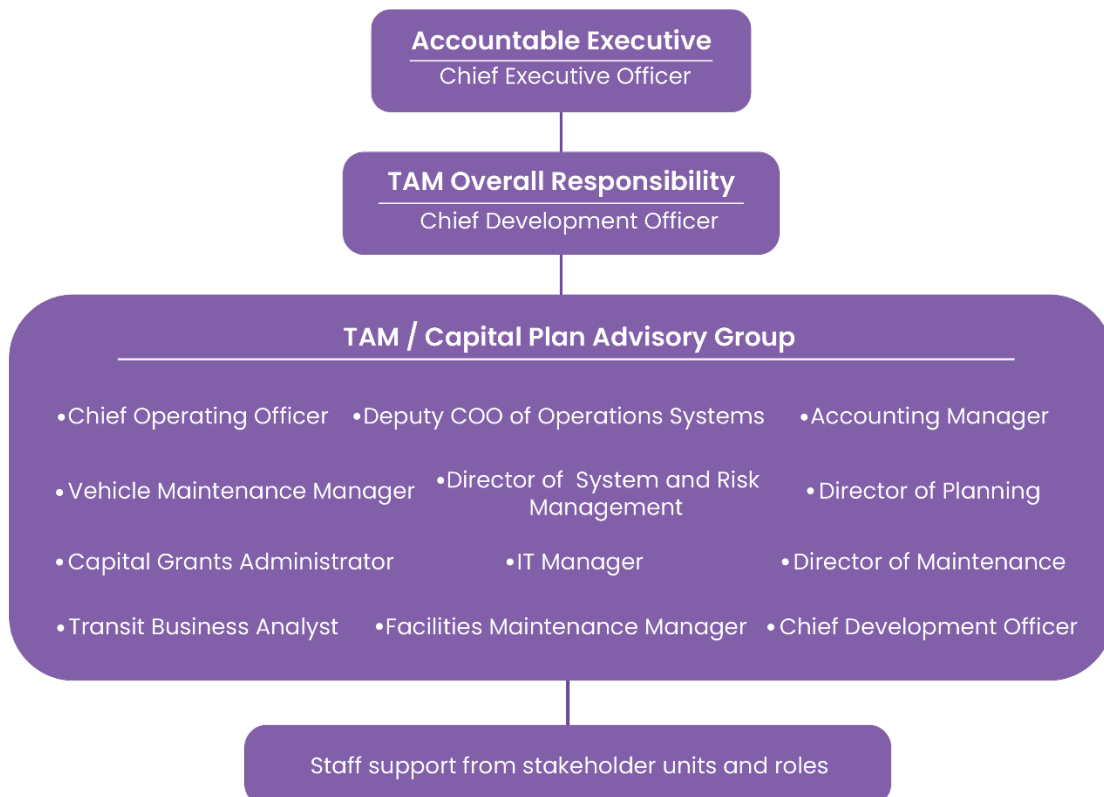
Enforcement Responsibility: Enforcement of the TAM policy will be the responsibility of the Chief Executive Officer (CEO), the Accountable Executive for WeGo.

Overall Responsibility: The Chief Development Officer (CDO) has overall responsibility for managing the TAM program. The CDO oversees the development of TAM plans and procedures in cooperation with the Executive Leadership team, and reports to the CEO on the status of asset management for the agency.

Agency TAM Coordinator: The Director of Planning and Grants will coordinate TAM activities with leaders of WeGo's departments and offices as well as the external parties with whom coordination is required, GNRC and TDOT. The Director of Planning and Grants reports directly to the CDO.

TAM/Capital Plan Advisory Group: A group of key individuals, as shown in Figure 8 below, plays a critical role in the implementation and monitoring WeGo's TAM program in concert with the development of WeGo's annual Capital Investment Plan.

Figure 8. WeGo TAM Roles and Responsibilities





Chapter 2

SELF-ASSESSMENT: TAM PLAN IMPLEMENTATION 2018-2022

This chapter reviews the asset management targets and activities that were identified in the 2018 TAM Plan and provides a status update. This assessment includes both asset replacement/rehabilitation activities and programmatic action items. The focus here is on overall achievement relative to the goals set in 2018 for the 2018-2022 period. During this time frame WeGo was able to advance most of its planned capital program despite the challenges presented by the global COVID-19 pandemic, with the notable exception of delayed Access vehicle replacement due to supply chain disruptions.

2.1. STATE OF GOOD REPAIR

Table 6 summarizes the SGR metrics for WeGo including the actual SGR metrics for 2018, the targets for 2022 established in the 2018 TAM Plan, and actual SGR metrics for 2022.

Table 6. Summary of SGR Performance and SGR Targets: 2018 and 2022

Asset	ULB/TERM Rating	Performance Measure	2018 Actual Performance	FY22 Target Identified in the 2018 TAM Plan	FY22 Actual Performance
Buses	14	% exceeding ULB	20%	0%	0%
Access Vehicles	8	% exceeding ULB	38%	18%	59%
Non-Revenue Vehicles	8	% exceeding ULB	48%	60%	69%
Other Rubber-Tired Equipment (Forklifts, tow trucks, etc.)	14	% exceeding ULB	0	33%	38%
Facilities	3.0 TERM Rating	% below 3.0 TERM Rating	33%	33%	0%

2.2. ROLLING STOCK AND NON-REVENUE SERVICE VEHICLE REPLACEMENT

WeGo has largely fulfilled its objectives for replacing buses between 2018 and 2022. WeGo currently has 14 New Flyer Articulated buses on order and is anticipating delivery in the 4th quarter of calendar year 2022. In addition, 20 Gillig 40-foot buses are on order with an anticipated delivery early in the 2nd quarter of 2023.

Table 7. Status of Bus Replacements Planned in the 2018 TAM Plan

2018			2019			2020			2021			2022		
ID	Year	Model	ID	Year	Model	ID	Year	Model	ID	Year	Model	ID	Year	Model
600	2004	GILLIG	601	2004	GILLIG	816	2004	GILLIG	604	2009	GILLIG H S	1203	2010	MCI OTR
800	2004	GILLIG	603	2005	GILLIG	825	2004	GILLIG	605	2009	GILLIG H S	1204	2010	MCI OTR
801	2004	GILLIG	650	2005	GILLIG	829	2004	GILLIG	675	2009	GILLIG HYB	186	2010	NABI HYBRID
802	2004	GILLIG	651	2005	GILLIG	860	2005	GILLIG	676	2009	GILLIG HYB	187	2010	NABI HYBRID
803	2004	GILLIG	652	2005	GILLIG	861	2005	GILLIG	879	2006	GILLIG	188	2010	NABI HYBRID
805	2004	GILLIG	655	2005	GILLIG	862	2006	GILLIG	880	2006	GILLIG	189	2010	NABI HYBRID
808	2004	GILLIG	656	2005	GILLIG	864	2006	GILLIG	882	2006	GILLIG	190	2010	NABI HYBRID
810	2004	GILLIG	657	2005	GILLIG	865	2006	GILLIG	885	2006	GILLIG	191	2010	NABI HYBRID
811	2004	GILLIG	658	2005	GILLIG	867	2006	GILLIG	1200	2009	MCI OTR	192	2010	NABI HYBRID
812	2004	GILLIG	831	2004	GILLIG	868	2006	GILLIG	1201	2009	MCI OTR	193	2010	NABI HYBRID
813	2004	GILLIG	835	2004	GILLIG	869	2006	GILLIG	1202	2009	MCI OTR	194	2010	NABI HYBRID
814	2004	GILLIG	838	2004	GILLIG	870	2006	GILLIG	180	2009	NABI HYBRID	195	2010	NABI HYBRID
815	2004	GILLIG	842	2004	GILLIG	871	2006	GILLIG	181	2009	NABI HYBRID	196	2010	NABI HYBRID
817	2004	GILLIG	847	2005	GILLIG	872	2006	GILLIG	182	2009	NABI HYBRID	197	2010	NABI HYBRID
818	2004	GILLIG	849	2005	GILLIG	873	2006	GILLIG	183	2009	NABI HYBRID	198	2010	NABI HYBRID
821	2004	GILLIG	851	2005	GILLIG	874	2006	GILLIG	184	2009	NABI HYBRID	199	2010	NABI HYBRID
824	2004	GILLIG	852	2005	GILLIG	875	2006	GILLIG						
826	2004	GILLIG	853	2005	GILLIG	876	2006	GILLIG						
827	2004	GILLIG	855	2005	GILLIG	878	2006	GILLIG						
830	2004	GILLIG	857	2005	GILLIG									
832	2004	GILLIG	859	2005	GILLIG									
832	2004	GILLIG												
836	2004	GILLIG												
837	2004	GILLIG												
840	2004	GILLIG												
841	2004	GILLIG												
843	2004	GILLIG												
844	2004	GILLIG												
845	2004	GILLIG												
846	2004	GILLIG												
883	2006	GILLIG												

Disposed	
Disposal Scheduled for 2022	
Overdue for Disposal	

2.3. STATUS OF FACILITIES PROJECTS INCLUDED IN THE 2018 TAM PLAN

The status of specific facilities projects identified in the 2018 TAM Plan are presented in Table 10.

Table 10. Status of Facility Projects Included in the 2018 TAM Plan

Location	Project	2022 Status
Central	Facility Renovation	Complete
Central	Additional concrete repair & waterproofing	Complete
Central	Static wayfinding	Complete
Central	Outdoor pavilions (replace circular shelters)	Planned
Nestor	Administrative area renovation	Complete
Nestor	Furniture (administrative renovation)	Complete
Nestor	Demolition of bus wash	Complete
Nestor	Demolition of underground storage tanks	In progress
Nestor	Sinkhole repair and parking area restoration	In progress
Nestor	New sewer service. Disconnect from dilapidated line	In progress
Nestor	Abandon/grout existing sewer service. Grout/seal line contributing to subsidence	In progress
Nestor	ADA/lift safety improvements. Rework stairs to rear lot, construct new ramps.	In progress
Nestor	Parking lot repairs	Complete
Myatt	Mechanical improvements following study recommendations	In progress
Myatt	Building Envelope - exterior insulation & glazing	Complete
Myatt	HVAC unit for basement - Currently no HVAC in lower level	In progress
Hillsboro	Neighborhood Centers (Hillsboro)	Complete
TSU	TSU Transit Center	Deferred
Nolensville	Shelter/stop improvements (Nolensville)	Complete
Bellevue	Heavy maintenance at Bellevue Park & Ride	Complete
Various	Ongoing maintenance at facilities	Complete
Various	4-year facility condition assessments	Complete

2.4. STATUS OF EQUIPMENT PROJECTS INCLUDED IN THE 2018 TAM PLAN

Table 11 summarizes the status of equipment projects listed in the 2018 TAM Plan.

Table 11. Status of Equipment Replacements/Improvements Included in the 2018 TAM Plan

Location	Project	2022 Status
Systemic	Upgrade of two-way radio communications system	Complete
Systemic	Upgrade of fare collection system	Complete
Systemic	Upgrade on-board video surveillance systems	Complete
Systemic	Training and safety system software	In progress
Systemic	Upgrade paratransit dispatch/scheduling software upgrade	Planned
Systemic	Project management software	Deferred
Systemic	Mobility on Demand Software and Systems Pilot	In progress

2.5. STATUS OF ACTION ITEMS IN THE 2018 TAMP IMPLEMENTATION ROADMAP

In addition to setting SGR targets for various asset classes, the 2018 TAM Plan provided an implementation roadmap that addressed a wide range of organizational activities that would support WeGo's TAM program. Thirty-four goals related to nine policy areas were identified through extensive engagement of internal stakeholders. The pages to follow review the goals and policies in the 2018 TAM Plan, the agency's status in 2018, and the 2022 status of each action items included in the roadmap.



Table 12. Status of 2018 TAM Plan Action Items Related to Policy

Policy: Provide agency-wide direction and leadership to increase WeGo's asset management practice maturity.			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Ensuring the agency has well-defined vision, policies and goals, and these are reviewed as part of the continuous improvement plan. ■ Identify the factors that drive the TAM objectives (TAM enablers). ■ Integrate TAM with the agency's business processes and link TAM Plan to other internal and external plans. 	<ul style="list-style-type: none"> ■ TAM vision, policies, and goals did not exist at WeGo, but were developed as part of the 2018 TAM plan and adopted by the agency. ■ TAM drivers were identified as part of this TAM plan. ■ TAM plan was not part of the agency's business processes 	<ul style="list-style-type: none"> ■ Develop and promote TAM vision, policies, and goals at all levels of the agency. 	<ul style="list-style-type: none"> ■ WeGo developed the 2018 TAM Plan with input from a Committee that represented a wide range of stakeholders within the agency.
		<ul style="list-style-type: none"> ■ Self-certify the agency by the Accountable Executive and adopt the plan as an official agency plan as part of the business processes and the capital investment decision-making process. 	<ul style="list-style-type: none"> ■ WeGo self-certified and has met all FTA-requirements for reporting and coordination. WeGo began the practice of preparing a detailed, fiscally constrained, five-year capital plan annually.

Table 13. Status of 2018 TAM Plan Action Items Related to Organizational Efficiency and Effectiveness

Organizational Efficiency and Effectiveness: Improve organizational efficiency by employing effective asset management processes			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Build understanding and support for asset management at all levels of WeGo, including executive level. ■ Improve and expand communications with WeGo’s departments and contractors regarding well-documented SGR needs and priorities. ■ Document and manage organizational knowledge and lessons-learned. 	<ul style="list-style-type: none"> ■ The executive suite at WeGo recognized the importance of TAM for the agency, but this recognition did not flow down the organization. ■ There were no established lines of communication across WeGo’s departments and with contractors. Communications were based on individual relationships and not institutionalized. ■ Organizational knowledge and processes were not documented. Some departments (e.g. Procurement) had documented processes while others did not. 	<ul style="list-style-type: none"> ■ Promote the importance of TAM practices for the agency, and the role of staff in successful implementation of the TAM plan, using internal campaigns. 	<ul style="list-style-type: none"> ■ While WeGo has been actively engaged in implementing TAM practices, there have not been TAM-focused campaigns.
		<ul style="list-style-type: none"> ■ Establish and institutionalize a systematic communication protocol across WeGo’s departments and with contractors, as part of an enterprise-level management system (see 7. Tools). 	<ul style="list-style-type: none"> ■ WeGo is moving forward with a facilities EAM using Oracle Unifier. ■ Solicitation is underway for a consultant to assist with procurement of an EAM for vehicle asset management.
		<ul style="list-style-type: none"> ■ Document organizational knowledge and processes through development of Standard Operating Procedures (SOP) and maintaining them up-to-date. 	<ul style="list-style-type: none"> ■ SOPs have been developed. They vary in the degree to which they are current and the degree to which they are followed in actual practice. The evaluation of maintenance practices as part of the 2022 Access Study found some variance between SOPs and practice within the Access fleet.
		<ul style="list-style-type: none"> ■ Promote coordination between the TAMP, the Transit Agency Safety Plan, the CIP, and the MPO’s TIP and MTP to build synergy and reduce duplication of efforts. 	<ul style="list-style-type: none"> ■ Coordination of the TAMP, PTASP, CIP, and TIP, occurs during the routine course of business.

Table 14. Status of 2018 TAM Plan Action Items Related to Fiscal Sustainability

Fiscal Sustainability: Foster financial sustainability by implementing asset management and promoting the TAM culture at the agency			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Adopt TAM processes and SGR needs as part of WeGo’s annual budgeting process and Capital Investment Plan (CIP). ■ Promote preservation of existing assets while planning for addition of new assets and replacement of existing assets. ■ Utilize objective methods to prioritize capital projects 	<ul style="list-style-type: none"> ■ Capital planning was not based on TAM processes and SGR needs. Capital planning did not consider effects of budgeting scenarios on future asset performance. ■ The agency had a PM plan for its vehicles and its facilities. Asset maintenance, especially for facilities, was reactive and mostly deals with repairing existing conditions. ■ Focus was on maintaining existing assets, while there was a need for expansion. ■ Capital projects were not prioritized to address improving existing asset conditions 	<ul style="list-style-type: none"> ■ Establish objective models to consider effects of budgeting scenarios on future performance of assets. (see 7. Tools). 	<ul style="list-style-type: none"> ■ Budgeting scenarios are taken into consideration when developing the five-year Capital Investment Plan.
		<ul style="list-style-type: none"> ■ Utilize enterprise-level asset management system to make asset maintenance, especially for facilities, more proactive by leveraging preventive maintenance (PM) programs for facilities. (see 7. Tools). 	<ul style="list-style-type: none"> ■ WeGo is moving forward with an EAM using Oracle Unifier. ■ Solicitation is underway for an EAM for vehicle asset management.
		<ul style="list-style-type: none"> ■ Expand the existing PM plan for vehicles with greater support from data systems so that the life cycle cost benefits of proposed maintenance and overhaul strategies can be documented. 	<ul style="list-style-type: none"> ■ WeGo is currently updating the Preventive Maintenance Plan and does so when a new vehicle type is placed into service. ■ A solicitation is underway for an EAM for vehicle asset management The EAM will facilitate analysis of life cycle costs.
		<ul style="list-style-type: none"> d) Establish more objective prioritization approach for capital projects as part of an enterprise-level asset management system (see 7. Tools). 	<ul style="list-style-type: none"> ■ Though the enterprise-wide asset management system has not been procured, WeGo has had SGR goals in mind when building the annual Capital Investment Plan.

Table 15. Status of 2018 TAM Plan Action Items Related to Human Capital

Human Capital: Promote asset management culture at WeGo and develop the human capital necessary for TAM implementation			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Promote TAM across all levels at WeGo ■ Promote knowledge sharing within the agency, and with contractors ■ Recruit, develop and retain well-trained TAM workforce ■ Develop succession plan for key roles at the agency 	<ul style="list-style-type: none"> ■ There was not an agency-wide recognition of the need for structured TAM practices. ■ The agency had not established a practice to document institutional knowledge of the senior staff. Knowledge of the agency’s assets, tools, and processes was not shared within the agency. ■ The agency had not institutionalized utilizing senior, experienced staff to mentor junior staff (apprenticeship). ■ The agency did not have a workforce that was trained for TAM procedures and tools. ■ The agency did not have succession plan for key, senior staff. 	<ul style="list-style-type: none"> ■ Establish a practice to document institutional knowledge of the senior staff, and their knowledge of the agency’s assets, tools, and processes. 	<ul style="list-style-type: none"> ■ Documentation of institutional knowledge remains a current need.
		<ul style="list-style-type: none"> ■ Train workforce for TAM procedures and tools. 	<ul style="list-style-type: none"> ■ Some TAM practices have been integrated into routine workflows. The phrasing of this action item will be revised in 2022 as “establish clear protocols and routines for practices integral to TAM, such as in preventive maintenance.”
		<ul style="list-style-type: none"> ■ Develop a plan for TAM education, which should include tracking FTA publications, webinars, and conferences, to provide WeGo staff with ongoing training in TAM procedures. 	<ul style="list-style-type: none"> ■ WeGo staff routinely participate in learning opportunities related to asset management, but there is not a need to identify this as an action item.
		<ul style="list-style-type: none"> ■ Develop succession plan for the key, senior staff, including job descriptions, required experience and training, and leverage the mentorship and training programs to prepare more junior staff for taking on new responsibilities 	<ul style="list-style-type: none"> ■ WeGo is formalizing normal workflows and integrating them into the EAM system.

Table 16. Status of 2018 TAM Plan Action Items Related to Safety

Safety: Maintain WeGo assets in State of Good Repair (SGR) to support a safe operating environment			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Maintain vehicles, equipment, infrastructure systems and facilities in SGR. ■ Promote a safety culture at the agency, and align asset and safety management practices ■ Proactively review and communicate safety-related issues with the staff. ■ Use asset data and subject matter expertise to identify and avoid or minimize road calls and failures and move toward a proactive management of assets ■ Identify recurring asset issues and failures and provide a plan to address the root of the issue. 	<ul style="list-style-type: none"> ■ WeGo did not have SGR policies and targets that supported a safe operating environment, even though the agency at large has adopted a safety culture. ■ Asset performance data and subject matter expertise were not used to identify issues or failures that can be avoided through a proactive management of assets. ■ Many recurring issues were reported while the root causes were not addressed. 	<ul style="list-style-type: none"> ■ Establish SGR policies and targets that support safe operating environment by linking the agency's Safety Plan and TAM Plan (in compliance with 49 CFR Part 673, Public Transportation Agency Safety Plan). 	<ul style="list-style-type: none"> ■ Several of the activities prescribed in the PTASP are also supportive of asset management: monitoring adherence to PM schedules, effectiveness of corrective maintenance, frequency of maintenance-related road calls, and safety defect reporting.
		<ul style="list-style-type: none"> ■ Through establishing an objective, proactive approach and by utilizing an enterprise-level asset mgmt. system (see 7. Tools and 8. Data), use asset performance data and subject matter expertise to identify recurring issues or failures (e.g. road calls) that can be avoided. 	<ul style="list-style-type: none"> ■ WeGo is moving forward with a facilities EAM using Oracle Unifier ■ WeGo has not yet acquired an enterprise-level asset management (EAM) system for vehicles, but this is a high priority. A consultant will be hired in 2022 to develop the scope for a future RFP for the EAM system.

Table 17. Status of 2018 TAM Plan Action Items Related to State of Good Repair Investments

SGR Investments: Invest in WeGo assets and SGR and promote the culture of “Asset Stewardship” at all levels of the agency			
2018 TAM Goals	Status in 2018	2018 Action Items	Status of Action Item in 2022
<ul style="list-style-type: none"> ■ Maintain vehicles, equipment, infrastructure systems and facilities in SGR. ■ Develop TAM plan and policies in compliance FTA TAM Rule (49 CFR § 625). ■ Develop and implement preventive and proactive capital asset maintenance, replacement and rehabilitation plans. 	<ul style="list-style-type: none"> ■ WeGo did not yet have SGR policies and targets that support their capital investment decisions. ■ The agency did not yet have a TAM plan in compliance with FTA TAM Rule. ■ The agency did not have proactive, preventive maintenance of their assets, except for their vehicles. 	<ul style="list-style-type: none"> ■ Develop and adopt a TAM plan in compliance with FTA TAM Rule (see 1. Policy). 	<ul style="list-style-type: none"> ■ The TAM Plan was adopted in 2018 in advance of the FTA deadline.
		<ul style="list-style-type: none"> ■ Establish SGR policies and targets that support capital investment decisions. 	<ul style="list-style-type: none"> ■ The 2018 TAM Plan included policies and targets that supported capital investment decisions.
		<ul style="list-style-type: none"> ■ Update the target on an annual basis and submit them to NTD along with a narrative report (see 10. Annual Submissions). 	<ul style="list-style-type: none"> ■ WeGo submitted SGR targets to NTD on an annual basis. Targets did not change during the four-year period.
		<ul style="list-style-type: none"> ■ Establish proactive, preventive maintenance for assets, especially facilities. Maintain and update the preventive maintenance plan for vehicles. 	<ul style="list-style-type: none"> ■ WeGo has a Preventive Maintenance Plan that is updated when a new fleet is placed in service and has been updated recently. WeGo needs to ensure that OEM PM schedules for each make/model/year vehicle are followed with fleet groupings. This will be facilitated by the vehicle EAM system to be implemented.
		<ul style="list-style-type: none"> ■ Establish a Fleet Management Plan for prioritizing replacement or retiring of service vehicles based on SGR targets. 	<ul style="list-style-type: none"> ■ WeGo has a detailed Fleet Management Plan for revenue service vehicles.

Table 18. Status of 2018 TAM Plan Action Items Related to Asset Management Tools

Tools: Provide infrastructure and tools to support data-driven decision-making for asset management			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Assess and implement tools to support data driven asset management decisions across stakeholder agencies. ■ Utilize historical data and trends to inform future decisions. ■ Ensure investment decisions are based on the assessment of business benefits, are transparent, and are clearly communicated 	<ul style="list-style-type: none"> ■ The tools and systems that are utilized by WeGo’s departments do not support data driven decision making, and in many cases do not provide the stakeholder with the knowledge they need to make decisions. ■ There are multiple “legacy” systems that collect data (in many cases data for the same asset or performance, e.g. condition) in different databases, and these legacy systems are not connected and do not communicate, leading to “silo-ed” organization. ■ Historical data and trends are not documented and not used for decision making. ■ Business benefits of capital investments are not studied in many cases, which include effects of budget allocations and funding scenarios on future asset performance through performance and lifecycle modeling. 	<ul style="list-style-type: none"> ■ Explore solutions for the enterprise-level management system through a Request for Information (RFI), or inviting the vendors to the “Vendor Day” 	<ul style="list-style-type: none"> ■ WeGo is moving forward with a facilities EAM using Oracle Unifier. ■ WeGo has not yet acquired an EAM system for vehicles, but this is a high priority. A consultant will be hired in 2022 to develop the scope for a future RFP for the EAM system.
		<ul style="list-style-type: none"> ■ Implement an enterprise-level transit asset management system that supports multiple departments at WeGo, by processing historic and current data and trends to inform the decision-making process. ■ Note: This enterprise system to encompass tools to support life-cycle cost (LCC) analysis and planning for all asset classes, preventive maintenance planning for facilities and vehicles, capital investment prioritization and optimization based on SGR targets and capital budgets, forecasting asset performance for different capital investment scenarios, among other features. 	<ul style="list-style-type: none"> ■ WeGo is moving forward with a facilities EAM using Oracle Unifier. ■ Solicitation is underway for a consultant to advance the procurement of an EAM for vehicle asset management. Once the EAM is implemented it will be possible for WeGo to analyze lifecycle costs.

Table 19. Status of 2018 TAM Plan Action Items Related to Data

Data: Collect relevant, timely, and accurate data that can support the decision- making process and TAM processes			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Highlight the need for collecting the right data, one time, at the right time, in the right format. ■ Develop data management protocols to ensure the data collection supports multiple agency needs. ■ Improve data sharing across stakeholder agencies so multiple departments benefit from data collection (data collected once, used by many). 	<ul style="list-style-type: none"> ■ The data collected by the WeGo's departments do not follow a universal data management plan, and in many cases the data is not collected at the right time, or in the right format. ■ In some cases, the same data is collected by multiple departments in different formats for different purposes, while the data can be collected once and used many times by multiple departments. 	<ul style="list-style-type: none"> ■ Develop and adopt a universal data management plan, to support the enterprise transit asset management systems (See 7. Tools), and to promote collection of data at the right time, and in the right format. 	<ul style="list-style-type: none"> ■ WeGo has not yet developed a data management plan.
		<ul style="list-style-type: none"> ■ Leverage the data management plan to ensure the same data is not collected by multiple departments in different formats for different purposes. This plan should ensure the data can be collected once and used many times by multiple departments, to the extent possible. This may be done concurrently with enterprise TAM system implementation, and the data management plan requirements can be incorporated in the requirements for the TAM system implementation. 	<ul style="list-style-type: none"> ■ WeGo has not yet developed a data management plan.
		<p>Collect inventory and condition data for bus stops and shelters and add the data to the Enterprise-Level TAM System (See 7. Tools)</p>	<ul style="list-style-type: none"> ■ WeGo has an inventory of all shelters and plans to replace them at the end of their useful life. However, since most bus stops and shelters have a value less than \$50,000, they are not included in the asset list for the 2022 TAM Plan.

Table 20. Status of 2018 TAM Plan Action Items Related to Continuous Improvement

Continuous Improvement: Meet all FTA requirements at each deadline, and continue to develop the processes, tools, and data for an optimum return on investment			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> ■ Continue meetings of the TAM Steering Committee to identify issues and coordinate solutions. ■ Evaluate the ongoing TAM processes, implementation costs, and benefits. ■ Monitor TAM programs at other agencies to evaluate best practices. 	<ul style="list-style-type: none"> ■ A TAM steering committee was formed as part of the TAM plan development effort, and the committee monitors ongoing TAM processes, implementation costs, and benefits. The committee is meeting monthly during the development phase. ■ The steering committee should continue meeting regularly to evaluate ongoing TAM processes, implementation costs, and benefits. ■ WeGo has only recently started monitoring TAM programs at other peer agencies to inform their TAM practices and evaluate best practices. ■ The steering committee monitors both RTA and WeGo TAM plan development and will serve as an advisory board for both ■ agencies' TAM programs. 	<ul style="list-style-type: none"> ■ The steering committee to continue meeting regularly to evaluate ongoing TAM processes, implementation costs, and benefits. 	<ul style="list-style-type: none"> ■ WeGo determined that it was not necessary for the Steering Committee that guided the development of the 2018 TAM Plan to continue meeting through the four-year period. A team of executive staff and project managers meets annually to develop the detailed Capital Investment Plan and update the Fleet Management Plan.
		<ul style="list-style-type: none"> ■ Develop contacts with a set of peer agencies known for best practices for their TAM programs. The steering committee to monitor TAM programs at other peer agencies to inform TAM practices at WeGo and evaluate best practices. 	<ul style="list-style-type: none"> ■ The Steering Committee has not been active. There has not been outreach to peer agencies to evaluate their TAM programs.
		<ul style="list-style-type: none"> ■ The steering committee to conduct agency TAM self-assessment on an annual basis by engaging appropriate staff, monitor progress toward TAM policies and goals, and SGR targets, and revise the implementation roadmap or policies, if necessary. 	<ul style="list-style-type: none"> ■ The Steering Committee has not been active. Staff have monitored progress toward SGR goals.

Table 21. Status of 2018 TAM Plan Action Items Related to Annual Submissions

Annual Submissions: Comply with annual submissions to FTA and MPO			
2018 TAM Goals	Status in 2018	2018 Action Items	Status in 2022
<ul style="list-style-type: none"> Comply with required activities of 49 CFR § 625. 	NA	<ul style="list-style-type: none"> Complete NTD asset inventory module (AIM) report annually. Develop an inventory of assets and report the data and other information required to the NTD asset inventory module report. Additional data required by NTD includes information used to calculate the TAM metrics. 	<ul style="list-style-type: none"> WeGo submitted AIMs to NTD on time annually.
		<ul style="list-style-type: none"> Conduct and report facility condition assessments. Assess the condition of all the capital assets in TAM plan and report the condition assessments for facility category assets to the NTD. (Every year a portion of the facility capital assets can be submitted until all facility capital assets have been reported to the NTD in a four-year cycle). 	<ul style="list-style-type: none"> Facility condition assessments were conducted for the 2018 TAM Plan and have been updated for the 2022 TAM Plan Update.
		<ul style="list-style-type: none"> Set Performance Targets. Set SGR targets annually for the performance of assets and submit those targets to the NTD as part of annual data submission. 	<ul style="list-style-type: none"> WeGo submitted SGR targets to NTD on time annually.
		<ul style="list-style-type: none"> Submit narrative report to the NTD that provides a description of any change in the condition of the transit system from the previous year and describes the progress made during the year to meet the performance targets set in the previous reporting year. 	<ul style="list-style-type: none"> WeGo submitted narrative reports to NTD on time annually.
		<ul style="list-style-type: none"> Update the TAM plan in its entirety every four years. 	<ul style="list-style-type: none"> This 2022 TAM Plan Update satisfies the requirement to update the TAM plan every four years.
		<ul style="list-style-type: none"> Share the updated TAM plan with planning partners and coordinate with the MPO's development of their TIP and MTP. 	<ul style="list-style-type: none"> The 2022 TAM Plan Update has been shared with planning partners.



Chapter 3

ASSET INVENTORY AND CONDITION ASSESSMENT

The Final Rule requires that WeGo's TAM Plan include an inventory of assets that support the delivery of public transportation services as well as information on the condition of those assets. Covered assets must be reported in TAM plans regardless of whether or not they were purchased with FTA funds or are still under lien. TAM plans must include:

- Rolling stock (vehicles used in providing revenue service)
- Equipment with an acquisition value of \$50,000 or greater
 - Service vehicles (vehicles supporting the agency but not used for revenue service)
 - Other equipment
- Facilities (including all passenger facilities except for bus stops)

Individual bus stops and shelters are typically excluded from a TAM plan. However, they may be included in the inventory for the sake of providing a more thorough and complete inventory of capital assets. This inventory includes three custom-built bus stops.

3.1. ROLLING STOCK INVENTORY AND CONDITION

For vehicles (either revenue or non-revenue service vehicles), condition is evaluated in relation to a Useful Life Benchmark (ULB), defined as *“the expected lifecycle of a capital asset for a particular transit provider’s operating environment, or the acceptable period of use in service for a particular transit provider’s operating environment.”* ULB is not the same as the term “useful life” that FTA

uses with regard to the minimum life of federally-funded assets. Transit agencies may set their own ULBs or use default values that FTA has provided for different types of assets. The FTA's default ULB values are listed in Appendix B.

The rolling stock of a transit agency refers to the vehicles used to perform revenue service. WeGo's rolling stock includes buses and Access cutaway vans. At the time of this report (July 2022), WeGo owned 168 buses. A detailed listing of all vehicles in WeGo's rolling stock inventory is provided in Appendix C.

3.1.1. Bus Inventory and Condition

WeGo's bus inventory has an average age of 6.7 years and an average accumulated mileage of 243,194. WeGo has adopted a Useful Life Benchmark (ULB) of 14 years for its buses, and accordingly, 0% of these vehicles exceeded the ULB. The oldest bus in the fleet is a 13-year-old NABI. The bus fleet is summarized in Table 22. Figure 9 displays some of the bus models in WeGo's current fleet.

Figure 9. Examples of WeGo Bus Models



BAE Series ER 40' Hybrid Bus



Access Cutaway Van

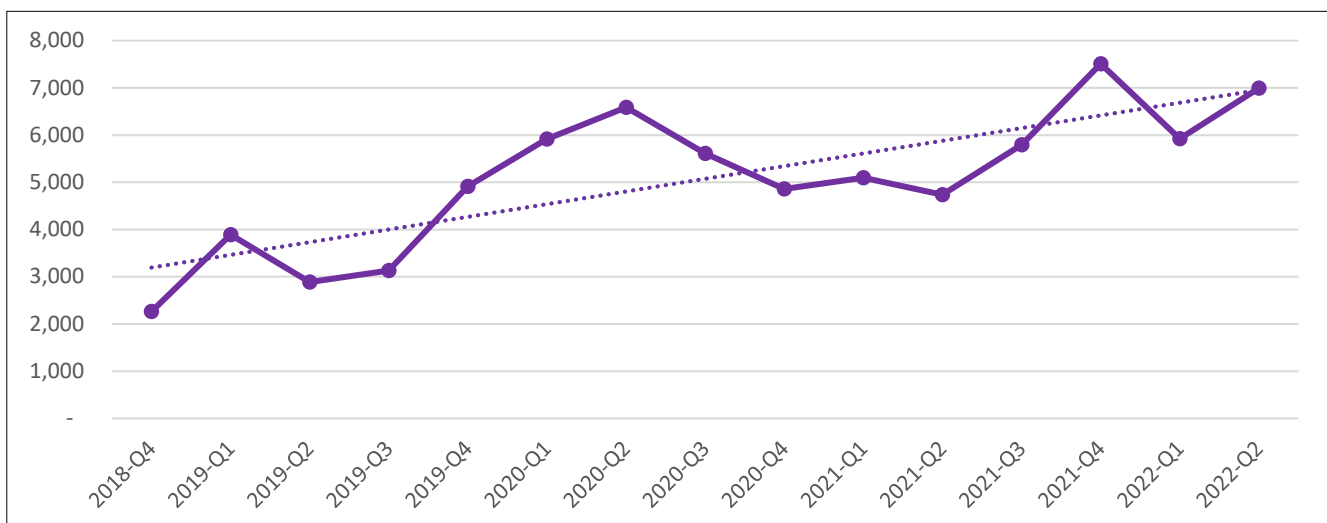


New Flyer 60 ft. Hybrid Articulated Bus

Table 22. Bus Inventory and Condition

Make	Year	Length	Motive Power	Number	Average Age	Average Mileage	ULB	#>ULB
NABI	2009	60'	Hybrid	1	13	181,076	14	0
NABI	2010	60'	Hybrid	14	12	409,336	14	0
GILLIG	2011	40'	Diesel	24	11	438,341	14	0
GILLIG	2012	40'	Hybrid	12	10	422,039	14	0
NEW FLYER	2013	60'	Hybrid	10	9	352,394	14	0
NEW FLYER	2013	60'	Hybrid	9	9	345,030	14	0
GILLIG	2014	40'	Hybrid	4	8	263,293	14	0
PROTERRA	2014	35'	Battery Electric	9	8	46,015	14	0
NEW FLYER	2017	60'	Hybrid	4	5	206,693	14	0
BAE	2017	40'	Hybrid	4	5	186,756	14	0
BAE	2018	40'	Hybrid	39	4	165,634	14	0
BAE	2019	40'	Hybrid	12	3	126,255	14	0
PROTERRA	2019	35'	Battery Electric	2	3	25,440	14	0
GILLIG	2020	40'	Clean Diesel	19	2	70,982	14	0
NEW FLYER	2021	60'	Clean Diesel	5	1	63,096	14	0
Total				168	6.7	243,194		0
Percent Exceeding ULB								0%

WeGo tracks the number of road calls and scheduled miles driven for its rolling stock, among other performance indicators. Average Miles Between Road Calls (AMBRC) is calculated as the total scheduled miles driven divided by the total number of road calls for each month. The AMBRC for WeGo's buses is shown by quarter in Figure 10 for the period between October 2018 and June 2022 and illustrates a general upward trend. It should be noted that higher AMBRC indicates fewer road calls and a more reliable operation. Tracking this performance indicator can provide insight into how well WeGo's SGR efforts (capital investment and routine maintenance activities) are improving the reliability of the fleet.

Figure 10. Average Miles Between Road Calls (AMBRC) for WeGo's Buses: 2018-Q4 to 2022-Q2

3.1.2. Access Vehicle Inventory and Condition

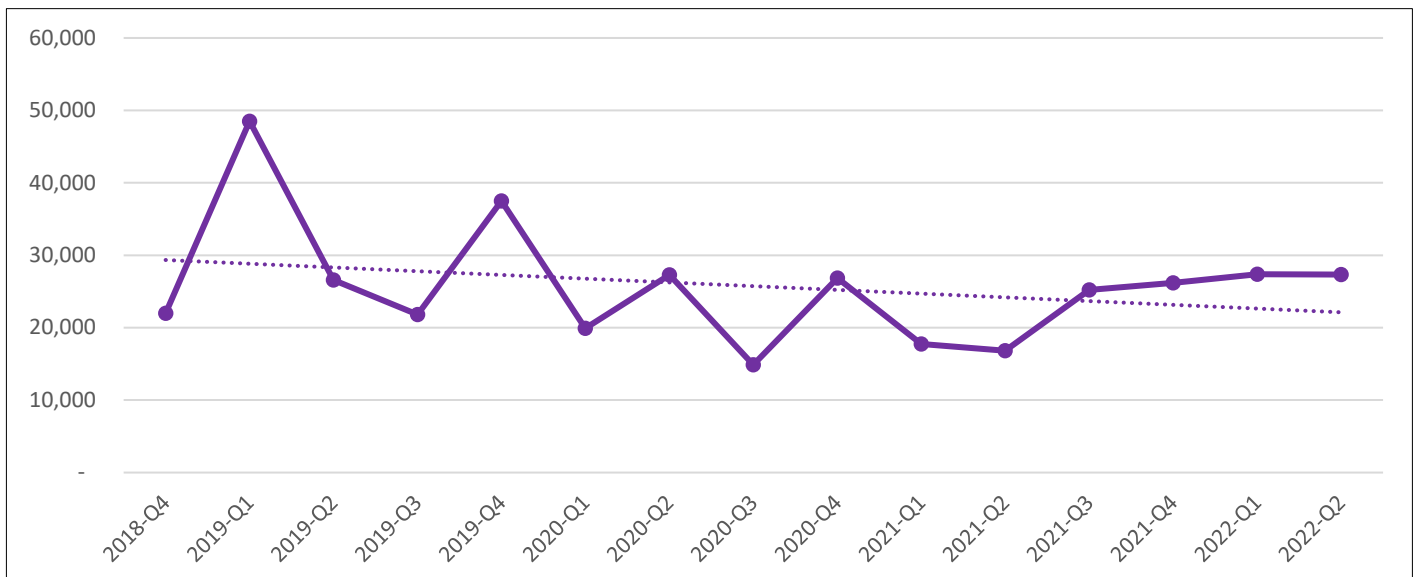
At the time of this report (July 2022), WeGo owns 91 Access vehicles, which are summarized in Table 23. This fleet has an average age of 6.9 years and an average mileage of 223,436. WeGo has adopted a ULB of 8 years for its vans and 59% of its cutaway vans (total of 54) have met or exceeded the ULB, with an average mileage of 223,436.

Table 23. Access Cutaway Van Inventory and Condition

Model	Year	Type	Motive Power	Number	Average Age	ULB	# > ULB	Average Mileage
Glaval	2010	Standard	Diesel	1	12.0	8	1	367,651
Glaval	2012	Standard	Hybrid	6	10.0	8	6	332,104
Starcraft	2013	Standard	Diesel	5	9.0	8	5	154,764
Glaval	2013	Standard	Diesel	27	9.0	8	27	341,206
Glaval	2013	Standard	Diesel	15	9.0	8	15	328,126
Champion	2018	Standard	Diesel	13	4.0	8	0	111,742
Champion	2018	Low Floor	Diesel	5	4.0	8	0	82,705
Champion	2019	Standard	Diesel	19	3.0	8	0	63,053
Total				91	6.9		54	223,436
							Percent Exceeding ULB	59%

The AMBRC for WeGo's cutaway vans is shown by quarter in Figure 11 for the period between October 2018 and June 2022. Over this period the general trend is a slight decline in AMBRC. This is likely due to the aging Access vehicle fleet and the delays in vehicle replacement caused by supply chain disruption.

Figure 11. Average Miles Between Road Calls (AMBRC) for WeGo's Access Cutaway Vans: 2018-Q4 to 2022-Q2



3.2. EQUIPMENT INVENTORY AND CONDITION

Equipment includes non-revenue service vehicles, other rubber-tired machinery, and other assets such as software or farebox equipment.

3.2.1. Non-Revenue Service Vehicles

At the time of this report (July 2022), WeGo owned 51 non-revenue service vehicles, with an average age of 8.8 years, and an average mileage of 72,206. WeGo has adopted a ULB of 8 years for its service automobiles (including pickup trucks and utility vans), and 14 years for other rubber-tired vehicles. Sixty-nine percent of non-revenue service vehicles exceed ULB and 38% of other rubber-tired equipment exceeds ULB. Table 24 and Table 25 provide information about non-revenue service vehicles and other rubber-tired equipment such as forklifts and tow trucks.

Table 24: Non-Revenue Passenger Vehicle Inventory and Condition

Make	Year	Number	Average Mileage	Average Age	ULB	# > ULB
CHEVY	2007	2	153,422	15	8	2
CHEVY	2013	1	27,205	9	8	1
DODGE	2010	4	95,296	12	8	4
FORD	2005	2	171,582	17	8	2
FORD	2006	3	104,772	16	8	3
FORD	2010	1	51,552	12	8	1
FORD	2011	8	117,700	11	8	8
FORD	2012	4	54,792	10	8	4
FORD	2013	1	189,184	9	8	1
FORD	2014	5	73,582	8	8	5
FORD	2015	1	69,185	7	8	0
FORD	2016	1	25,295	6	8	0
FORD	2019	7	21,667	3	8	0
FORD	2020	4	14,774	2	8	0
JEEP	2017	3	35,834	5	8	0
NISSAN	2013	1	13,780	9	8	1
NISSAN	2014	3	37,950	8	8	3
Total		51	72,206	8.8	8	35
Percent Exceeding ULB						69%

Table 25. Rubber-Tired Equipment Inventory and Condition

Make	Type	Year	Number	Mileage	Age	ULB	% > ULB
Bett	Boom Truck	2017	1	N/A	5.0	14	0
Freightliner	Tow Truck	2013	1	80,992	9.0	14	0
Freightliner	Tractor	2016	1	13,836	6.0	14	0
Kaufman	Trailer	2016	1	N/A	6.0	14	0
Toyota	Forklift	2000	1	N/A	22.0	14	1
Toyota	Electric Forklift	2000	1	2,453	22.0	14	1
Toyota	Electric Forklift	2013	1	1,933	9.0	14	0
Toyota	Propane Forklift	2000	1	N/A	22.0	14	1
Total			8	16,536	12.2		3
Percent Exceeding ULB							38%

3.2.2. Other Equipment (Non-Vehicular Fixed Assets)

The TAM Final Rule requires inclusion of non-vehicular equipment with an acquisition value (original cost) more than \$50,000. Table 26 summarizes WeGo's inventory of these assets. These assets are listed in Appendix D. Equipment such as communication and security systems have individual components which have an acquisition cost under \$50,000 but are included if the cost of the system meets the threshold.

Table 26. Other Assets with an Acquisition Cost Over \$50,000

Asset Type	Total Acquisition Cost
Land	\$14,733,025
Fare Collection Equipment	\$9,823,994
Network, Software, Operating, and Training Systems	\$2,068,963
Shop Equipment	\$1,369,648
Miscellaneous	\$27,415,936

Figure 12. Examples of WeGo Service Vehicles



3.3. FACILITY INVENTORY AND CONDITION

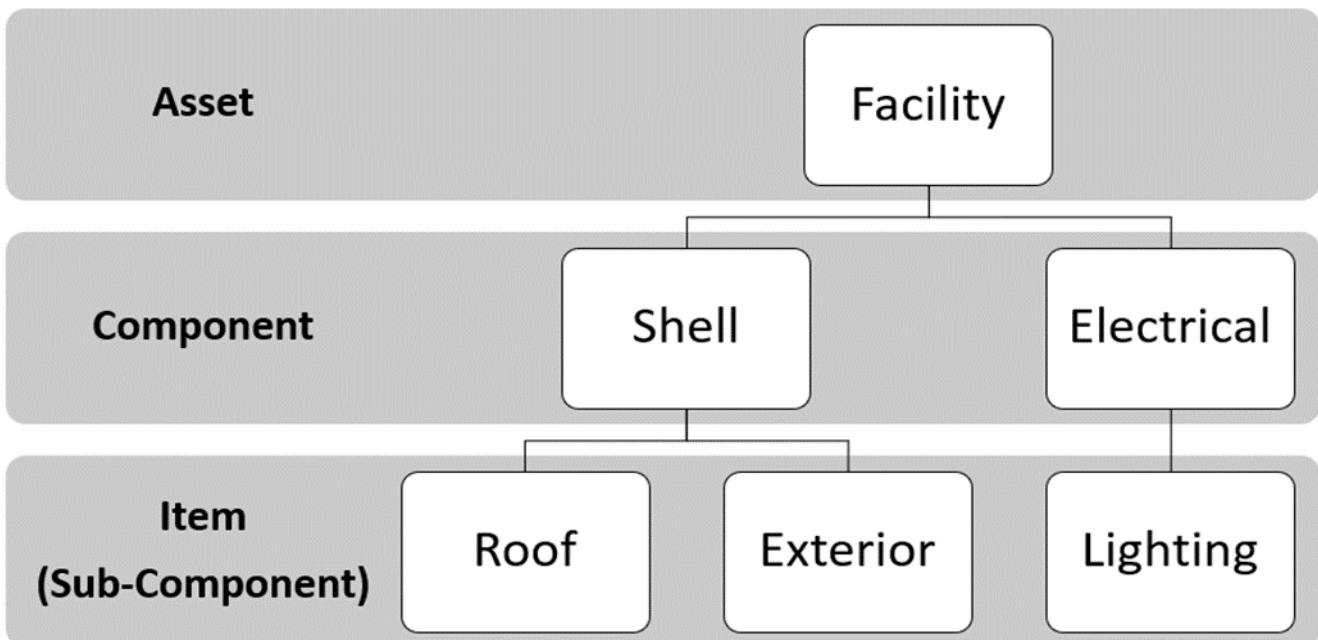
The condition of transit facilities is evaluated using the Transit Economic Requirements Model (TERM) scale. Facility condition data must be fully updated at least every four years. The TERM scale assigns numerical ratings based on guidelines summarized in Figure 13.

Figure 13. TERM Scale Facility Condition Ratings

TERM Rating	Condition	Description
5	Excellent	No visible defects, new or near new condition, may still be under warranty if applicable
4	Good	Good condition, but no longer new, may have some slightly defective or deteriorated component(s), but is overall functional
3	Adequate	Moderately deteriorated or defective components; but has not exceeded useful life
2	Marginal	Defective or deteriorated component(s) in need of replacement; exceeded useful life
1	Poor	Critically damaged component(s) or in need of immediate repair; well past useful life

FTA's Facility Condition Assessment Guidebook treats the overall facility as a hierarchy of assets, breaking down the facility into components, and each component into sub-components. Condition assessment is conducted at the sub-component level, which then rolls up to the condition of components, and condition of components rolls up to the condition of the facility overall. This is illustrated in Figure 14. The asset hierarchy for WeGo's assets is outlined in Appendix E.

Figure 14. Asset Hierarchy – Facility, Components, and Items



The TAM Final Rule requires that TAM plans include facilities (except bus stops and facilities over which WeGo does not have direct capital responsibility) without regard to their acquisition cost. WeGo owns multiple administrative, maintenance, and passenger facilities that are listed in Table 27. CDM Smith and WIN Engineering, along with WeGo, inspected these facilities in June and July of 2022 based on FTA's guidelines. Table 27 provides the TERM ratings for facility components and overall facility condition. It should be noted that WeGo shares the Riverfront charging station with the Regional Transportation Authority of Middle Tennessee (RTA) and that facility will be included in RTA's TAM Plan. It is provided here for reference but excluded from the calculation of WeGo's performance metric for facilities overall. It should also be noted that, even though WeGo owns the State Garage, it is operated and maintained by the State of Tennessee as part of a long-term lease.

Table 27. TERM Ratings for WeGo Facilities

Facility	Type	Substructure	Shell	Interiors	Conveyance	Plumbing	HVAC	Fire Protection	Electrical	Equipment	Site	Facility Rating
Bellevue Park & Ride	Park & Ride	-	-	-	-	-	-	-	-	-	3.0	3
Central	Passenger Station	3.5	2.9	2.9	2.0	4.0	3.8	4.0	3.5	-	4.6	4
Myatt	Admin. & Maint.	3.8	3.2	3.6	1.0	3.9	3.4	3.2	3.8	4.1	4.0	4
Nestor	Admin & Maint.	3.2	2.7	3.4	2.0	3.6	3.2	3.2	3.7	4.1	3.4	3
Rosa Parks Charging Station	Charging Facility	-	-	-	-	-	-	-	4.0	-	4.0	4
State Garage at Central	Parking	2.6	2.2	3.0	-	4.0	4.0	4.0	3.4	-	-	3
Nolensville & Welshwood Shelters	Transit Stops	5.0	4.0	-	-	-	-	-	-	-	4.4	4
Hillsboro Transit Center	Transit Center	5.0	5.0	5.0	-	-	-	-	-	-	5.0	5
Riverfront Charging Station*	Charging Facility	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Percent of Facilities Below 3.0 on TERM Scale:												0%

* This facility is shared with the Regional Transportation Authority of Middle Tennessee (RTA). RTA will report this facility in their TAM plan.

According to FTA, the performance measure for facilities is the percentage of facilities rated below 3.0 on the TERM scale, without regard to the size, value or the level of responsibility for the asset. The average facility rating for WeGo is 4.1 on the TERM Scale. None of WeGo's facilities received an overall TERM rating below 3.0.



Chapter 4

STATE OF GOOD REPAIR AND PERFORMANCE TARGETS

WeGo Public Transit aims to have a robust system-wide State of Good Repair (SGR) program that will preserve transit capital assets and support quality customer service. The capital expenditures that are necessary to maintain SGR include preventative maintenance, repair of faulty components, rehabilitation or overhaul of assets, and replacement. Defining SGR for WeGo's assets enables the agency to set appropriate targets, use the targets as benchmarks to track progress, and prioritize capital improvements. The SGR policy is closely aligned with WeGo's mission and goals.

4.1. DEFINING STATE OF GOOD REPAIR (SGR)

SGR is defined by FTA as "the condition in which a capital asset is able to operate at a full level of performance" (TAM Final Rule 49 USC 625, §625.5). The SGR is considered to be met for a particular asset when the asset:

- Is performing its designed function.
- Is operable and reliable (not imposing the risk of stranding passengers in unsafe or unhealthy situations).
- Has met or recovered the lifecycle investments.

This SGR definition, originally adopted as part of the 2018 TAM plan, remains relevant because it relates to the appropriate targets and progress measures relative to a set benchmark. The objective of maintaining SGR, therefore, provides direction and guidance for the entire TAM Plan process of systematic and data-driven asset management.

The FTA's TAM Final Rule established the following four performance measures for capital asset categories. These performance measures provide a framework for transit providers to establish their current asset performance state, and also monitor the performance of their assets over time to evaluate the outcomes of capital investment decisions. These performance measures are listed in Table 28.

Table 28. Performance Measures for Transit Asset Categories

Asset Category	FTA established Performance Measure
Rolling Stock	% of revenue vehicles exceeding ULB
Equipment	% of non-revenue service vehicles and other equipment exceeding ULB
Facilities	% of facilities rated under 3.0 on the TERM** scale
Infrastructure	% of track segments under performance restriction

In WeGo's case, the Infrastructure category does not apply since WeGo (MTA) does not operate rail transit. It should be noted that the performance measures are expressed as the percentage of assets that are not in a state of good repair (SGR). In other words, lower performance measures indicate better SGR.

4.2. ULB AND TARGET SETTING

The Federal Transit Administration (FTA) has established an expected Useful Life Benchmark (ULB) for various asset categories based on national experience (Table 29). The ULB rating sets the expected years of service a vehicle (or asset) can provide before the costs to maintain, rehabilitate, or otherwise attempt to keep the asset in a state of good repair begin to outweigh the asset's benefits. Transit agencies may, at their discretion, adjust their target ULBs based on their specific operating environment and direct experience with their assets. Defining ULBs is the first step in tracking WeGo's performance towards achieving a state of good repair. WeGo's 2018 TAM Plan adopted FTA's ULB's and after a thorough staff review, WeGo will continue to utilize FTA's ULBs for this TAM update.

The second step in monitoring WeGo's SGR requires the setting of targets that identify the percentage of assets that should be held in a favorable state of repair relative to the adopted ULBs. Keeping assets in a positive SGR improves the operating efficiency and overall reliability of the transit agency as discussed in Chapter 1. The adoption of performance targets is in the section to follow.

Table 29. Useful Life Benchmarks for WeGo Assets

Asset Category	ULB/TERM Rating
Rolling Stock - Buses	14 years
Rolling Stock - Access Vehicles	8 years
Equipment - Non-Revenue Vehicles	8 years
Equipment - Other Rubber-Tired Equipment	14 year
Facilities	3.0 TERM Rating

4.3. PERFORMANCE TARGETS

WeGo has reviewed and updated the performance target for each asset class based on the current condition of assets, future budget outlook, and the ability to replace vehicles given ongoing supply chain challenges. These targets meet the requirements of FTA final rulemaking on transit asset management and performance reporting, and are achievable and reasonable for WeGo, given its fiscal constraints. Table 30 and Table 31 provide a summary of both past and current performance measures for WeGo's asset categories, and its targets for Fiscal Year 2022 and beyond.

WeGo met three of the five ULB performance targets for 2022: buses, facilities, and other rubber-tired equipment. The 2018 Transit Asset Management plan targets were set with the expectation of continued service levels as well as moderate expansion. In addition, assumptions were made based on experience as to the availability and build-time of various vehicles and equipment. The impacts of the 2020 pandemic on service demand, supply chains, and parts availability severely affected transit systems across the country, and specifically WeGo in relation to achieving the ULB performance targets for Access cutaway vans and non-revenue service vehicles. Although WeGo ordered 25 cutaways in early 2021 to replace aging Access cutaways, the vehicles have still not been delivered due to supply chain issues arising from the pandemic. This has resulted in an actual FY22 rating for cutaway vans of 59%, well above the 18% target.

Table 30. Summary of 2018 TAM Performance Measures and Targets

Asset	Performance	FY18 Actual	FY22 Target	FY22 Actual
Rolling Stock (Buses)	% exceeding ULB	20%	33%	0%
Rolling Stock (Cutaway Vans)	% exceeding ULB	38%	18%	59%
Service Vehicles	% exceeding ULB	48%	60%	69%
Other Rubber Tired Equipment	% exceeding ULB	48%	60%	38%
Facilities	% below 3.0 TERM Rating	33%	33%	0%

Table 31 provides a summary of the performance measures WeGo has adopted for the FY23 through FY26. The relatively high percentage of cutaway vans and service vehicles that have exceeded WeGo's ULB of 8 years will persist until automotive supply chain challenges ease. WeGo placed an order for 40 cutaways in early 2022 but they will not be delivered until FY2024; a specific delivery date is yet to be determined. The performance targets for buses and other rubber-tired equipment will hold steady through the four-year period. The performance target for facilities is increased from 0% in FY2022 to 25% in FY2026.

Table 31: Summary of Performance Measures and Targets

Asset	FY22 Actual	FY23 Target	FY24 Target	FY25 Target	FY26 Target
Rolling Stock (Buses)	0%	0%	0%	0%	0%
Rolling Stock (Cutaway Vans)	59%	60%	20%	20%	20%
Service Vehicles	69%	50%	35%	30%	20%
Other Rubber Tired Equipment	38%	38%	38%	38%	38%
Facilities	0%	25%	25%	25%	25%

4.4. SGR POLICY AND MAINTENANCE PLAN

The purpose of the SGR policy is to keep the assets in a state of good repair through optimizing the capital investment plan to achieve these targets. Failure to achieve or maintain a state of good repair leads to safety risks for the users of public transit, decreased system reliability, more road calls, shorter distances between failures, higher maintenance costs, lower system performance, and eventually lower customer satisfaction.

The SGR condition of vehicles, equipment, and facilities is directly affected by the preventative, corrective, and routine maintenance that they receive. WeGo Public Transit has addressed this with a comprehensive Maintenance Plan (2019), which detailed maintenance objectives, roles, and processes. The Maintenance Plan was updated in 2022 and includes the following objectives:

- Average 5,500 miles between mechanical road calls; and
- Complete 80% of all scheduled inspections on time.

The Asset Maintenance Plan also illustrates how the TAM Plan can define the need to link different agency processes together. Implementing, tracking, and reporting on metrics requires a data system that can glean information from work orders, field reports, daily reports, and monthly reports. Further, the data system must be able to precisely define the terms used (for example, distinguishing between in-service mileage and deadhead mileage). Finally, all data items in the system must be accessible so that individual data items can be aggregated and cross-tabulated. This allows trends to be discovered, and any data item can be compared with any other data item through ad hoc report building.



Chapter 5

ASSET PRIORITIZATION AND DECISION SUPPORT TOOL

FTA requires that TAM plans provide a decision support tool for prioritizing capital investments. FTA's website defines "decision support tool" as "an analytic process or tool that (1) assists in capital asset investment prioritization and/or (2) estimates capital needs over time (does not necessarily mean software)." This chapter documents the decision support tools that are currently in use by WeGo and provides an analytical framework to test and underpin WeGo's approach.

5.1. WEGO'S OVERARCHING CAPITAL FUNDING STRATEGY

This section describes the prioritization strategy for WeGo's capital projects. Facility-related projects are categorized in the following order of priority.

- **Safety / Regulatory Projects:** Completing projects required for safety or by law/regulation is at the top of WeGo's priority list.
- **State of Good Repair (SGR):** Maintaining the existing transit system in a State of Good Repair (SGR) is also one of WeGo's highest priorities. Having well-maintained, reliable transit infrastructure will help ensure safe, dependable, efficient, and accessible services. Capital SGR projects include infrastructure rehabilitation, replacement, and repair.
- **Business Improvements:** In order to increase staff efficiency and improve business processes, WeGo will review and upgrade or implement strategic process improvements to streamline business efforts and increase effective use of existing resources.
- **Nashville Transportation Plan and Better Bus Improvements:** In order to provide increasingly meaningful service to Davidson County and Middle Tennessee residents, WeGo will improve its existing service, making it easier to use, more convenient, more comfortable, more efficient, and more accessible. Capital facility projects stemming from nMotion recommendations for Service Improvements include new and expanded passenger waiting shelters and neighborhood transit centers.

5.3. SUPPLEMENTAL PRIORITIZATION SCORE PROCESS (PS) FOR VEHICLES

The 2018 WeGo TAM Plan included a decision-making framework based on the calculation of a Prioritization Score (PS) for individual vehicles in the WeGo fleet. Since the development of the previous plan, WeGo has gone in a different direction with their decision-making framework, as described above. This plan affirms that change in direction, but also provides an updated Prioritization Score (PS) process for instances where finer-grained analysis, such as within a given sub-fleet, may be needed. Based on WeGo's asset management experience since the adoption of the 2018 plan, the prioritization scoring process now includes a refinement through changes in vehicle scoring weights. The details for the updated Prioritization Scoring process are described in the following sections.

To inform the prioritization of vehicles, the project team, in conjunction with WeGo staff, confirmed the use of both vehicle age and total mileage as the primary inputs. The methodology differs slightly from the PS scoring system in the 2018 TAM Plan, using a scale of 1 to 12 instead of the 1 to 8 scales used in 2018. As in the previous TAM, higher scores indicate higher priority for replacement. The PS may be used to refine the overall sub-fleet replacement plan if needed.

5.3.1. Vehicle Age Rating

WeGo's 2018 TAM Plan used a Vehicle Age Rating as the first component of the PS calculation. The rating reflects the relationship between each vehicle's age relative to its ULB, WeGo established the Vehicle Age Rating Criteria shown in Table 32. The 2018 TAM Plan included a rating scale of 0-2; however, to provide a higher level of granularity for analysis, this scale has been modified to 1-3. Eliminating the 0 rating from the age criteria reduces the effect of converting weights to 'zero' when performing the weighting factor analysis. Vehicles that are more than 2 years away from their ULB receive a rating of 1 (the best age rating), and vehicles that are at or have exceeded their ULBs receive a rating of 3 (the worst age rating).

Table 32. Vehicle Age Rating Criteria

Age in Relation to ULB	Previous Age Rating	Revised Age Rating
Age < ULB -2	0	1
(ULB -2) <= Age < ULB	1	2
Age => ULB	2	3

5.3.2. Vehicle Mileage Rating

To rate the vehicles for their mileage, the PS calculation uses the Vehicle Mileage Milestone (VMM) and the Annual Vehicle Mileage Milestone (AVMM), the VMM divided by ULB. The threshold VMM for various asset classes was selected based on factors such as the expiration of vehicle warranties and the third major preventative maintenance occurrence. These thresholds are shown in Table 33 for WeGo vehicle asset classes. After a vehicle has exceeded its VMM, recommended service schedules begin to repeat, requiring major service every 30,000 to 40,000 miles. At the same time, wear on the vehicle's other systems tend to make major repairs less cost-effective than vehicle replacement.

Table 33. Vehicle Mileage Milestones (VMM) and Annual Vehicle Mileage Milestones (AVMM)

Vehicle	VMM	AVMM = VMM / ULB
Automobile	100,000	12,500
Bus	350,000	25,000
Rubber Tired Vehicles	350,000	25,000
Cutaway Vans	150,000	18,750

As with the Vehicle Age Rating, the previous rating scale of 0-2 has been updated to 1-3. Table 34 details the rating system for vehicle mileage, with a score of 1 for the vehicles that still have more than 2 years until exceeding the VMM (based on Annual Vehicle Mileage Milestone = VMM / ULB) (best mileage rating), and a score of 3 (the worst rating) for the vehicles which have met or exceeded the VMM (worst mileage rating).

Table 34. Vehicle Mileage Rating Criteria

Mileage in Relation to VMM	Previous Mileage Rating	Current Mileage Rating
Mileage < VMM – (2 x AVMM)	0	1
Mileage > (VMM – (2 x AVMM)) and Mileage < VMM	1	2
Mileage => VMM	2	3

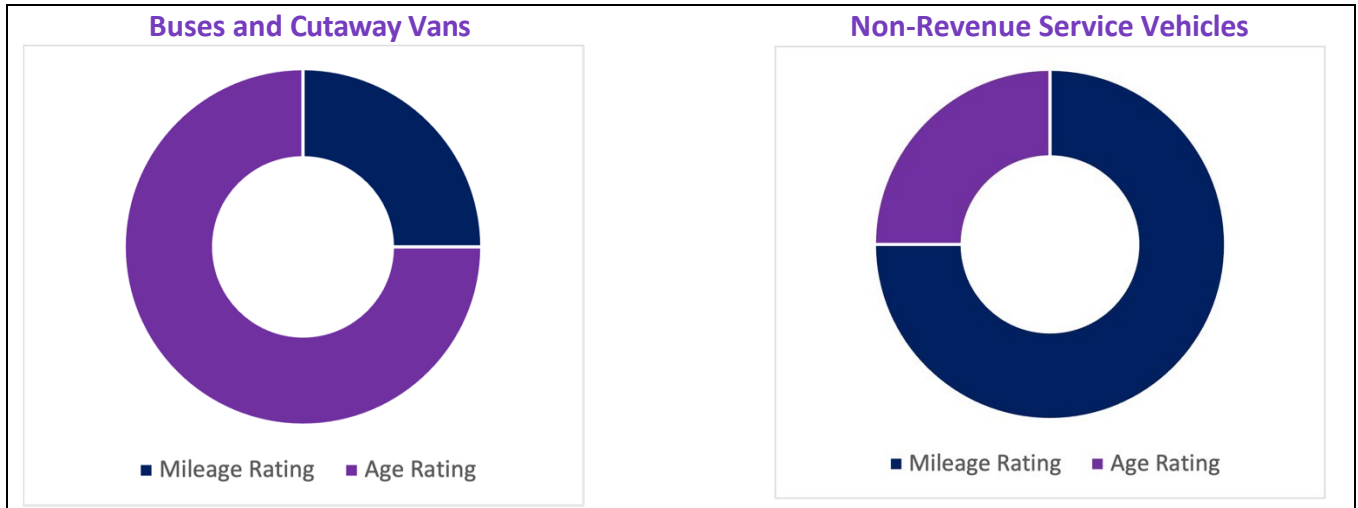
5.3.3. Weight of Age and Mileage Ratings in the PS Calculation

Based on the importance of the abovementioned factors to the decision-making process at WeGo, weights were assigned to these factors, as summarized in Table 35. It should be noted that the weights assigned to age and mileage ratings are different for buses and cutaways compared to service vehicles. Buses and vans accumulate more mileage over time because of the longer operating routes, and thus the age rating gets a higher weight. Service vehicles, on the other hand, remain idle most of the time and thus vehicles that are meeting or have exceeded their ULB, have a long way to meet their VMM. As a result, for service vehicles, mileage rating receives a higher weight factor. A breakdown of the PS is illustrated in Figure 16.

Table 35. Weight Factors for PS Factors

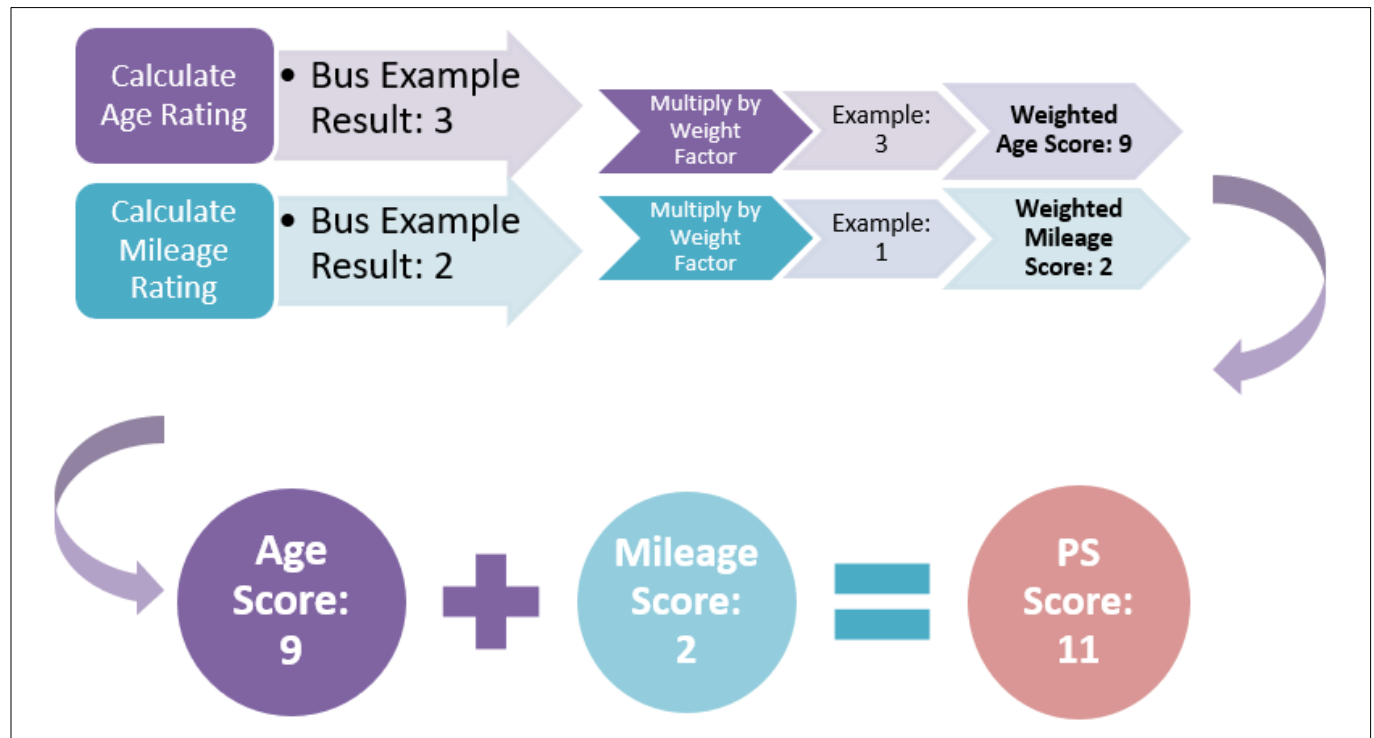
Criteria	Scale	Buses and Cutaway Vans	Service Vehicles
Age	1-3	3	1
Mileage	1-3	1	3
Maximum Value = 12			

Figure 16. Relative Weighting of Age and Mileage in Priority Score Calculation



The PS calculation process is represented graphically in Figure 17. The first step involves calculating the rating for vehicle age using the parameters in Table 32. This results in a number score between 1-3, with higher numbers equating to older vehicles. Step two involves calculating the rating for vehicle mileage using the parameters in Table 34, also resulting with a number score between 1-3. Higher numbers represent higher mileage. These results are then multiplied by the appropriate weighting factors as shown in Table 35, leading to a weighted Priority Score by vehicle.

Figure 17. Priority Scoring Process



WeGo has defined high, medium, and low PS categories according to the range of potential scores. Table 36 summarizes these categories and the action recommended to help achieve SGR. Vehicles that score 10 and above are identified as higher priority for replacement, while those below 7 are generally newer vehicles and do not require action. Those vehicles scoring at the higher end of the medium range (example, PS of 9) are approaching time for replacement.

Table 36. Priority Score (PS) Ranges and Actions

PS Range	Replacement Priority	Action Required
10-12	High	Replace
7-9	Medium	Needs Replacement Soon (in 2 years)
1-6	Low	No Action Needed.

5.4. REVIEW OF MILES BETWEEN ROAD CALLS AND OTHER FACTORS

As discussed in Chapter 3, average miles between road calls (AMBRC) is an important metric for the overall condition of the fleet and the effectiveness of the maintenance program. Just as the metric can be applied to the fleet as a whole, it can also be applied to sub-fleets and individual vehicles. WeGo staff regularly monitor MBRC for all vehicles. In cases where road calls increase in frequency WeGo staff can perform additional analysis to determine if some type of remedial action is warranted or if the vehicle should be considered for replacement earlier than initially planned.

A Miles Between Road Calls review requires a thorough understanding of the various types, and reasons, for a vehicle to be road-called. Mechanical issues can be complex and costly, or inexpensive and easy to replace. Vehicles that receive multiple road calls for significant mechanical issues may be pipelined to be replaced sooner provided they have reached FTA's minimum useful life per Circular 5010.1E. In addition to the frequency of road calls, a detailed review of vehicle condition would consider the vehicle's maintenance history, upcoming major service, fuel and flued consumption, as well as other factors.

WeGo's bus and cutaway replacement and procurement process involves purchasing multiple vehicles as part of a fleet or purchase order. These vehicles are generally delivered to WeGo in batches and are therefore tracked as a group based on age and vehicle manufacturer. Accordingly, PS scoring and any additional MBRC analysis can apply to individual vehicles or on a per fleet basis.

The outcomes of WeGo's prioritization process for managing assets are:

- Prioritization based on WeGo-specific system, ultimately addressing the high-risk assets first
- Maximizing utilization of the capital investment budget over the analysis period
- Meeting the performance targets and maintaining the SGR

5.5. FACILITY PROJECT PRIORITIZATION APPROACH

As with vehicles, all assets decline with age and/or use and require upkeep and investment. Multiple models have been developed to represent the general decline of an asset's condition over time. WeGo continues to utilize a condition-based assessment derived from FTA's Transit Economic Requirements Model (TERM). This type of model requires that a 'condition state' be defined as well as the probabilities of transition from one state to another (lower state) over time. In addition, costs of improving the condition from a lower to a higher state must be considered. The current assessment of WeGo facilities can be found in Chapter 3.

WeGo is responsible for maintaining multiple and varied subcomponents of facilities, from escalators within its Central facility to the administration facility at Myatt Drive. WeGo will use information obtained during the 2022 facility assessments to generate projects for inclusion in the work program. Projects will be programmed based on the hierarchy of priorities stated at the outset of this chapter and reiterated below:

- **Safety / Regulatory Projects**
- **State of Good Repair (SGR) Projects**
- **Business Improvement Projects**
- **Nashville Transportation Plan and Better Bus Improvements.**





Chapter 6

CAPITAL BUDGET AND INVESTMENT PRIORITIZATION

This chapter outlines the capital budget for WeGo, budget breakdown, descriptions, and also the outcomes of the capital investment prioritization.

6.1. WEGO CAPITAL INVESTMENT PLAN

WeGo's Board of Directors recognizes the need for advance planning regarding revenues and expenses in order to develop a broad funding policy for the Five-Year Capital Investment Plan (CIP), developed annually. The goals of CIP are to:

- Maintain assets in a state of good repair;
- Provide improvements to existing service for current riders; and
- Advance the initiatives adopted through previous plans, including the 2020 Nashville Transportation Plan, nMotion, and others to expand the use of mass transit in Davidson County.

This CIP generally identifies sources and amounts of projected capital funding as well as a framework for categorizing and prioritizing projects for funding decisions. Projects listed in the CIP for FY2023 and prior years generally (1) have been thoroughly scoped, and (2) have identified funding sources associated with them. Once approved in the Capital Plan, WeGo Board Members can next expect to see them reported out in a "project delivery" phase, such as design or procurement. Projects listed for FY2024 and beyond are more conceptual in nature and will most likely require more detailed scoping and the identification of specific funding sources. They are listed to facilitate discussion of WeGo priorities among members and will likely be presented in next year's CIP.

WeGo receives capital funding from federal, state, and local sources as identified in Table 37 and Table 38 below. The fund types that are included in WeGo's CIP sources are described in the subsequent sections.

Table 37. Federal Funding Sources

Funding Program	Source	Type
5307 – Urbanized Area Formula Grant	FTA	Formula
5339(a) – Bus and Bus Facilities Grant	FTA	Formula
5339(b) – Bus and Bus Facilities Grant	FTA	Discretionary
5339(c) - Low or No Emission Vehicle Program	FTA	Discretionary
Congestion Mitigation and Air Quality (CMAQ)	FHWA/Allocated by TDOT	Discretionary
Surface Transportation Block Grant Program	FHWA/Allocated by MPO	Discretionary
Carbon Reduction Program (New in IIJA)	FHWA	Discretionary
Safe Streets and Roads for All (New in IIJA)	FHWA	Discretionary
5309 - Small Starts	FTA	Discretionary
5309 - New Starts	FTA	Discretionary

Table 38. State and Local Funding Sources

Funding Program	Source	Type
Nashville Capital Spending Plan	Metro Nashville-Davidson	Annual Appropriation
State Matching Funds	TDOT	Formula
IMPROVE Act Funds	TDOT	Discretionary

6.1.1. Federal 5307 – Urbanized Area Formula Grants

The 5307 federal formula funding is provided to the Region based on reported and audited ridership data. Through annual agreements with regional partners at the MPO level, funding is split among WeGo, RTA (Regional Transportation Authority of Middle Tennessee), and Franklin Transit. These funds can also be “flexed” over to the operational budget to be used for preventative maintenance to some extent, as allowed by FTA regulation. These are typically “80%” funds, meaning that 80% of the funding shown is federal money while 10% of the money comes from the state and 10% comes from local sources.

At this time, WeGo estimates that it will receive approximately \$24.8M in 5307 funds in FY2023, increasing annually through FY2027. WeGo typically transfers approximately \$20M to the operations budget for Preventative Maintenance and ADA service costs, though the specific amount for this transfer is included as part of the annual operating budget process. For plan year FY2023, this need is mitigated by the availability of Federal American Rescue Plan Act funding.

FTA provides 5307 funding to public transit systems in Urbanized Areas (UZA) for public transportation capital projects, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. New 2020 census urbanized area boundaries and the possibility that the Nashville UZA will exceed one million in population could both impact available federal formula funding. When the Memphis UZA shifted into the over-one-million population category, the result was a significant drop in formula funding given FTA's process for apportioning funds.

Eligible activities include:

- Planning, engineering, design and evaluation of transit projects and other technical transportation- related studies;
- Capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and
- Capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.
- All preventive maintenance and some Americans with Disabilities Act (ADA) complementary paratransit service costs are considered capital costs.

6.1.2. Federal 5339 – Bus and Bus Facilities Program

FTA provides 5339 funding to states and transit agencies through a statutory formula for capital projects to replace, rehabilitate and purchase buses, cutaways, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no-emission vehicles or facilities.

The 5339(a) federal formula funding is provided to the region based on reported and audited bus ridership data. Though this funding could be divided among transit providers in the region (WeGo, RTA, and Franklin Transit), by mutual agreement WeGo receives the full allocation of regional 5339(a) funding. At this time, WeGo can reasonably predict that it will receive approximately \$1.5M in 5339 funds in FY2023. As with 5307 funding, these are typically "80%" funds, meaning that federal funds will cover 80% of project cost while the remaining 20% must be covered by non-federal sources. In Tennessee, typically 10% comes from the state and 10% comes from local sources.

6.1.3. Federal Congestion Mitigation and Air Quality (CMAQ)

Congestion Mitigation and Air Quality (CMAQ) funds are made available to the Tennessee Department of Transportation (TDOT) by FHWA. TDOT is responsible for managing a competitive selection process for projects based on proposed projects' ability to meet the emissions reduction goals of the CMAQ program. These funds typically are 80% federal and require a state and/or local match.

WeGo can apply to TDOT for capital funding for bus replacements, park and ride lots, and other projects that would result in a reduction of emissions. The timing and nature of TDOT's calls for projects are difficult to predict, and CMAQ funds cannot be relied upon as an ongoing and stable funding source. However, WeGo does review "shovel-ready" projects in its capital budget to submit CMAQ applications each year as eligible.

6.1.4. Federal Surface Transportation Block Grant (STBG) Funds and IIJA Funds

These are FHWA funds that are managed and allocated by the local Metropolitan Planning Organization (MPO), the Greater Nashville Regional Council (GNRC). WeGo can apply for these funds for use on capital projects, engineering, planning studies, and similar activities. These funds are also typically 80% Federal and require a state or local match.

6.1.5. State IMPROVE Act Funds

These are state funds that are allocated by TDOT through a competitive grant process. These funds require a local match, but the State recently reduced the required match amount for projects. WeGo can apply to TDOT for funding for a broad range of transit capital projects.

WeGo has a strategy for requesting these funds and keeps a list of eligible "shovel-ready" projects in its capital budget to submit IMPROVE Act applications each year. Current requests focus on bus replacements and matching funds for federal grants for bus replacements. Recently, WeGo was successful in receiving an award for IMPROVE acts funding for bus stop improvements, outdoor amenities, and a transit center.

6.1.6. State Match for Federal Funds

WeGo relies on state funding to provide a portion of the required match for federal funds, typically in the amount of 10% of the total project cost.

6.1.7. Metro Nashville-Davidson County Funds

WeGo also relies on local funding to provide matches to federal funds. Additionally, WeGo makes annual requests of 100% capital funding for specific capital needs including the replacement of aging buses and cutaways.

Funding is based on local approval of annual budgets. In order for WeGo to obligate funds to projects, funding for the project must be authorized through the Council-adopted annual Capital Spending Plan (CSP). For FY2022 Metro included \$29.3 million for different WeGo needs including replacement buses, stop and shelter improvements, and neighborhood transit center development. Prior to consideration in the CSP, projects must be identified in the Council-approved Capital Improvement Budget (CIB). The CIB is a planning document that communicates a wide variety of capital projects and indicates the extent to which these projects are consistent with the City's Comprehensive Plan. Funding of CIB projects through the CSP is dependent on the level of capital funding in a particular year relative to the planned projects.

Metro Council recently adopted a CIB for FYs 2022 through 2027. WeGo projects included in the

proposed CIB include matches to Federal and State grants, WeGo Access Replacement Buses, Fixed Route Transit Replacement Buses, Stop and Shelter improvements, Neighborhood Transit Centers projects, and other improvements related to the implementation of the Better Bus Plan.

6.1.8. Other

When projects that are deemed to be a WeGo priority cannot be funded through traditional formula sources, a dialogue is initiated with potential outside funding partners (i.e.: TDOT, GNRC, etc.) to identify other potential sources of funds. WeGo continuously reviews opportunities to apply for grants to support capital projects. Occasionally, there may be truly unique circumstances that generate other funds. Examples of some of the types of funding in play now include Federal “HOPE” funding toward the North Nashville Transit Center, FTA COVID Research funds to a reliability improvement project, and partner funding from the Nashville Downtown Partnership for the Connect Downtown Study.

Additional funding will be available to the region through the IJA. The Carbon Reduction Program (CRP), a formula program, provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO₂) emissions from on-road highway sources. The Safe Streets and Roads for All (SS4A) program, a discretionary program, supports local initiatives to prevent death and serious injury on roads and streets, commonly referred to as “Vision Zero” or “Toward Zero Deaths” initiatives. WeGo is also eligible to pursue discretionary RAISE grant funds and discretionary funds made available by FTA.



6.2. WEGO CAPITAL INVESTMENT LOOK AHEAD

Figure 18 illustrates the anticipated sources and amounts of funds available to WeGo for capital projects in FY2023, and Figure 19 illustrates the proposed project breakdown for this period.

Figure 18. Funding Sources for WeGo's FY2023 Budget

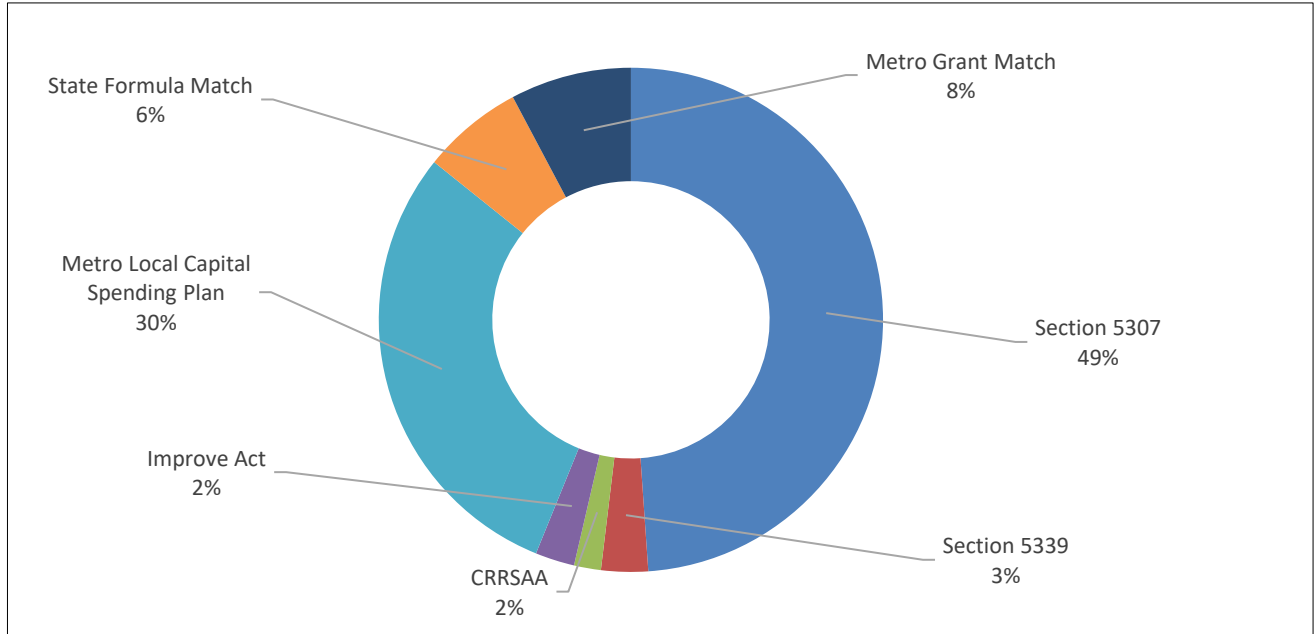


Figure 19. Capital Projects in WeGo's FY2023 Budget

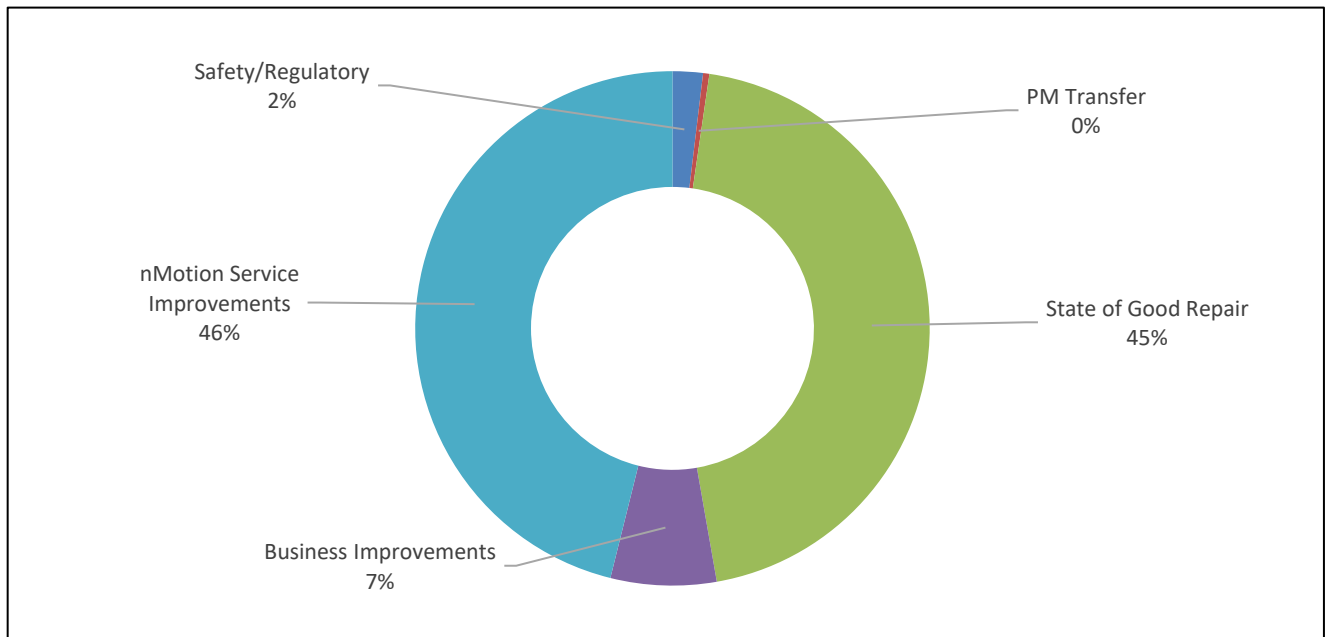


Table 39 outlines the details of WeGo’s 5-year capital budget plan. The FY2023 budget was adopted by the Board of Directors in June 2022. The FY2024 through FY2027 budgets are provided for planning purposes. Updates will be presented to the Board for adoption in each subsequent year.

Table 39. WeGo 5-Year Capital Plan Breakdown

		Adopted 6/2022	Anticipated Amounts for Planning Purposes			
CAPITAL PROJECT NEEDS		2023	2024	2025	2026	2027
Safety/Regulatory Projects		\$907,250	\$ -	\$ -	\$ -	\$ -
1	APC Software and NTD Reporting Solution	\$200,000	\$ -	\$ -	\$ -	\$ -
2	Bus Stop Lighting Solution	\$107,250	\$ -	\$ -	\$ -	\$ -
3	Transit Security Consultant Services	\$600,000	\$ -	\$ -	\$ -	\$ -
Preventive Maintenance and ADA Transfer		\$187,500	\$21,568,790	\$25,395,633	\$27,258,673	\$28,070,808
4	Operating Budget Capitalized to Offset Exp.	\$ -	\$21,381,290	\$25,208,133	\$27,071,173	\$27,883,308
5	Annual Leases for North Nashville Transit Center	\$187,500	\$187,500	\$187,500	\$187,500	\$187,500
State of Good Repair		\$21,418,897	\$18,359,414	\$20,970,264	\$18,111,496	\$11,389,281
Rolling Stock (Revenue)						
6	12-Year Heavy Duty Bus Replacement	\$10,688,870	\$8,337,319	\$13,131,569	\$10,650,941	\$4,027,992
7	5-Year Body-on-Chassis Bus Replacement	\$3,174,444	\$3,174,444	\$3,301,422	\$3,433,479	\$3,735,593
Equipment						
8	Non-Revenue Vehicle Replacement	\$655,272	\$148,820	\$71,238	\$81,268	\$148,820
9	IT Hardware, Software & Office Equipment	\$450,000	\$550,000	\$450,000	\$450,000	\$450,000
10	Replace Electric Bay, Waiting, and Lobby Signage	\$ -	\$2,500,000	\$ -	\$ -	\$ -
11	OnBoard & OnStreet IT Equipment Replacement	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Facilities						
12	Facility Maintenance & Capital Replacement	\$1,300,000	\$1,750,000	\$1,650,000	\$2,000,000	\$1,900,000
13	Nestor Phased Maint. Facility Upgrade Projects	\$4,000,000	\$1,500,000	\$1,500,000	\$1,000,000	\$750,000
14	Bus Stop Amenities Replacement	\$650,311	\$298,831	\$766,035	\$395,808	\$276,876
15	Central External Bay Coverings	\$400,000	\$ -	\$ -	\$ -	\$ -
Business Improvements		\$3,165,000	\$5,265,000	\$215,000	\$215,000	\$190,000
16	Nestor Space Improvement Initiative	\$150,000	\$ -	\$ -	\$ -	\$ -
17	Paratransit Dispatch/scheduling software upgrade	\$ -	\$3,000,000	\$ -	\$ -	\$ -
18	Yard Management and Enhanced Vehicle Tracking	\$2,000,000	\$ -	\$ -	\$ -	\$ -
19	EAM & ERP System	\$250,000	\$2,000,000	\$ -	\$ -	\$ -
20	Apprentice/Maintenance Training Program	\$200,000	\$200,000	\$150,000	\$150,000	\$125,000
21	Employee Information/Engagement Portal	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
22	Zero Emission Fleet Plan	\$500,000	\$ -	\$ -	\$ -	\$ -
nMotion Service Expansion/Service Improvement		\$21,979,440	\$12,338,000	\$12,335,650	\$6,200,000	\$6,200,000
23	Better Bus Fleet Expansion	\$10,180,000	\$4,838,000	\$6,135,650	\$ -	\$ -
24	Shelter Expansion/Upgrade Program	\$3,000,000	\$3,000,000	\$2,200,000	\$2,200,000	\$2,200,000
25	Bicycle Stations at Neighborhood Transit Center	\$99,440	\$ -	\$ -	\$ -	\$ -
26	Development of Transit Centers	\$8,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
QuickTicket Integration						
27	Vanderbilt Employee/Student ID Fare Integration	\$500,000	\$ -	\$ -	\$ -	\$ -
28	Transit App Integration	\$ -	\$500,000	\$ -	\$ -	\$ -
29	API Integration	\$200,000	\$ -	\$ -	\$ -	\$ -
Total Project Budget Requirements		\$47,658,087	\$57,531,204	\$58,916,547	\$51,785,169	\$45,850,089

6.3. PRIORITIZED VEHICLE REPLACEMENT PROJECTS

A series of tables provided below provides a list of the vehicles scheduled for replacement for each fiscal year between 2023 and 2027, including buses, cutaways, and non-revenue service vehicles. Each of these lists is accompanied by a table of estimated costs for the planned vehicle replacements relative to the corresponding line items in the WeGo Capital Investment Plan. Table 40 provides an index to the replacement lists and cost estimates for each fiscal year.

Table 40. Index to Vehicle Replacement and Cost Estimate Tables by Fiscal Year

Fiscal Year	List of Vehicles to be Replaced	Estimated Vehicle Replacement Cost
FY2023	Table 41	Table 42
FY2024	Table 43	Table 44
FY2025	Table 45	Table 46
FY2026	Table 47	Table 48
FY2027	Table 49	Table 50



Table 41. Prioritized List of Vehicles to be Replaced in FY2023

12-Year Buses				5-Year Cutaway Vans				Non-Revenue Vehicles			
ID	Year	Make	Model	ID	Year	Make	Model	ID	Year	Make	Model
182	2009	NABI H	60'	348	2012	FORD	GLAVAL	9723	2011	Ford	E250 Van
188	2010	NABI H	60'	349	2012	FORD	GLAVAL	9821	2011	Ford	Escape Hybrid
189	2010	NABI H	60'	350	2012	FORD	GLAVAL	9819	2011	Ford	Escape Hybrid
190	2010	NABI H	60'	351	2012	FORD	GLAVAL	9820	2011	Ford	Escape Hybrid
191	2010	NABI H	60'	20	2013	FORD	STARCRAFT	9818	2011	Ford	Escape Hybrid
192	2010	NABI H	60'	22	2013	FORD	STARCRAFT	9614	2011	Ford	F150 Pickup
193	2010	NABI H	60'	24	2013	FORD	STARCRAFT	9723	2013	Ford	F150 Pickup
194	2010	NABI H	60'	25	2013	FORD	STARCRAFT	9616	2013	Nissan	Leaf
195	2010	NABI H	60'								
196	2010	NABI H	60'								
197	2010	NABI H	60'								
198	2010	NABI H	60'								
199	2010	NABI H	60'								
1302	2014	Proterra Elec	35'								
1303	2014	Proterra Elec	35'								

Table 42. Estimated Vehicle Replacement Costs in FY2023

Replacement Vehicles		#	Estimated Cost Per Vehicle	Total Cost
Buses	New Flyer 60' Clean Diesel	14	\$827,339	\$12,282,742
	New 40' Clean Diesel	16	\$642,360	\$10,277,760
	Subtotal	30		\$21,865,252
Vans	Chevy Diamond 2022 DR	6	\$195,040	\$1,170,240
	Low Floor Mini Van 2022 DR	2	\$61,480	\$122,960
	Subtotal	8		\$1,293,200
Service Vehicles	Ford Escape	12	\$31,816	\$381,791
	Ford F150	3	\$53,445	\$160,336
	Ford F250 Pickup	2	\$63,780	\$127,560
	Ford F150 Pickup	3	\$53,445	\$160,336
	Ford 350 SRW	2	\$65,609	\$131,217
	Ford 350 DRW	4	\$67,188	\$268,752
	Subtotal	26		\$1,229,992
Total		64		\$24,388,444

Table 43. Prioritized List of Vehicles to be Replaced in FY2024

12-Year Buses				5-Year Cutaway Vans				Non-Revenue Vehicles			
ID	Year	Make	Model	ID	Year	Make	Model	ID	Year	Make	Model
700	2011	GILLIG	40'	23	2013	FORD	STARCRAFT	950	2010	FORD	FUSION H
701	2011	GILLIG	40'	362	2013	FORD	GLAVAL	9752	2011	FORD	RANGER PICKUP
702	2011	GILLIG	40'	364	2013	FORD	GLAVAL	9617	2013	CHEVY	VOLT
703	2011	GILLIG	40'	365	2013	FORD	GLAVAL	9619	2014	NISSAN	PATHFINDER H
704	2011	GILLIG	40'	366	2013	FORD	GLAVAL	9618	2014	NISSAN	PATHFINDER H
705	2011	GILLIG	40'	367	2013	FORD	GLAVAL	9620	2014	NISSAN	PATHFINDER H
706	2011	GILLIG	40'	368	2013	FORD	GLAVAL	9814	2014	FORD	ESCAPE H
707	2011	GILLIG	40'	369	2013	FORD	GLAVAL				
708	2011	GILLIG	40'	370	2013	FORD	GLAVAL				
709	2011	GILLIG	40'	371	2013	FORD	GLAVAL				
710	2011	GILLIG	40'	372	2013	FORD	GLAVAL				
711	2011	GILLIG	40'	374	2013	FORD	GLAVAL				
712	2011	GILLIG	40'	375	2013	FORD	GLAVAL				
713	2011	GILLIG	40'	376	2013	FORD	GLAVAL				
715	2011	GILLIG	40'	377	2013	FORD	GLAVAL				
716	2011	GILLIG	40'	378	2013	FORD	GLAVAL				
717	2011	GILLIG	40'	379	2013	FORD	GLAVAL				
718	2011	GILLIG	40'	380	2013	FORD	GLAVAL				
719	2011	GILLIG	40'	381	2013	FORD	GLAVAL				
720	2011	GILLIG	40'	382	2013	FORD	GLAVAL				
721	2011	GILLIG	40'	383	2013	FORD	GLAVAL				
722	2011	GILLIG	40'	384	2013	FORD	GLAVAL				
723	2011	GILLIG	40'	385	2013	FORD	GLAVAL				
724	2011	GILLIG	40'	387	2013	FORD	GLAVAL				
725	2012	GILLIG H	40'	388	2013	FORD	GLAVAL				
726	2012	GILLIG H	40'	389	2013	FORD	GLAVAL				
727	2012	GILLIG H	40'	391	2013	FORD	GLAVAL				
728	2012	GILLIG H	40'	392	2013	FORD	GLAVAL				
729	2012	GILLIG H	40'	393	2013	FORD	GLAVAL				
730	2012	GILLIG H	40'	394	2013	FORD	GLAVAL				
731	2012	GILLIG H	40'	395	2013	FORD	GLAVAL				
732	2012	GILLIG H	40'	396	2013	FORD	GLAVAL				
733	2012	GILLIG H	40'	397	2013	FORD	GLAVAL				
734	2012	GILLIG H	40'	398	2013	FORD	GLAVAL				
735	2012	GILLIG H	40'	399	2013	FORD	GLAVAL				
736	2012	GILLIG H	40'	400	2013	FORD	GLAVAL				
				401	2013	FORD	GLAVAL				
				402	2013	FORD	GLAVAL				
				404	2013	FORD	GLAVAL				
				406	2018	FORD	CHAMPION				
				407	2018	FORD	CHAMPION				

12-Year Buses				5-Year Cutaway Vans				Non-Revenue Vehicles			
ID	Year	Make	Model	ID	Year	Make	Model	ID	Year	Make	Model
				408	2018	FORD	CHAMPION				
				409	2018	FORD	CHAMPION				
				410	2018	FORD	CHAMPION				
				411	2018	FORD	CHAMPION				
				412	2018	FORD	CHAMPION				
				413	2018	FORD	CHAMPION				
				414	2018	FORD	CHAMPION				
				415	2018	FORD	CHAMPION				
				416	2018	FORD	CHAMPION				
				417	2018	FORD	CHAMPION				
				418	2018	FORD	CHAMPION				
				26	2018	FORD	CHAMPION LF				
				27	2018	FORD	CHAMPION LF				
				28	2018	FORD	CHAMPION LF				
				30	2018	FORD	CHAMPION LF				
				31	2018	FORD	CHAMPION LF				

Table 44. Estimated Vehicle Replacement Costs in FY2024

Replacement Vehicles		#	Estimated Cost Per Vehicle	Total Cost
Buses	40' Low Floor Clean Diesel	20	\$721,351	\$14,427,024
	Subtotal	20		\$14,427,024
Cutaway Vans	Ford Turtle Top DR	20	\$177,186	\$3,543,722
	Ford Turtle Top FR	20	\$221,705	\$4,434,108
	Ford Champion DR	25	\$142,905	\$3,572,625
	Subtotal	65		\$11,550,445
Service Vehicles	Ford Transit Van	3	\$46,459	\$139,376
	Ford Escape	2	\$33,725	\$67,450
	Subtotal	5		\$206,826
Total		90		\$26,184,305

Table 45. Prioritized List of Vehicles to be Replaced in FY2025

12-Year Buses				5-Year Vans				Non-Revenue Vehicles			
ID	Year	Make	Model	ID	Year	Make	Model	ID	Year	Make	Model
120	2013	New Flyer H	60'	420	2019	FORD	CHAMPION FR	9615	2012	FORD	ESCAPE H
121	2013	New Flyer H	60'	421	2019	FORD	CHAMPION FR	9719	2014	FORD	F350 PICKUP
122	2013	New Flyer H	60'	422	2019	FORD	CHAMPION FR	9719	2014	FORD	F350 PICKUP
123	2013	New Flyer H	60'	423	2019	FORD	CHAMPION FR	9718	2014	FORD	F350 PICKUP
124	2013	New Flyer H	60'	424	2019	FORD	CHAMPION FR	9725	2015	FORD	F150 PICKUP
125	2013	New Flyer H	60'	425	2019	FORD	CHAMPION FR	9726	2016	FORD	F350 PICKUP
126	2013	New Flyer H	60'	426	2019	FORD	CHAMPION FR				
127	2013	New Flyer H	60'	427	2019	FORD	CHAMPION FR				
128	2013	New Flyer H	60'	428	2019	FORD	CHAMPION FR				
129	2013	New Flyer H	60'	429	2019	FORD	CHAMPION FR				
130	2013	New Flyer H	60'	430	2019	FORD	CHAMPION FR				
131	2013	New Flyer H	60'	431	2019	FORD	CHAMPION FR				
132	2013	New Flyer H	60'	432	2019	FORD	CHAMPION FR				
134	2013	New Flyer H	60'	433	2019	FORD	CHAMPION FR				
135	2013	New Flyer H	60'	434	2019	FORD	CHAMPION FR				
137	2013	New Flyer H	60'	435	2019	FORD	CHAMPION FR				
139	2013	New Flyer H	60'	436	2019	FORD	CHAMPION FR				
140	2013	New Flyer H	60'	437	2019	FORD	CHAMPION FR				
141	2013	New Flyer H	60'	438	2019	FORD	CHAMPION FR				

Table 46. Estimated Vehicle Replacement Costs in FY2025

Replacement Vehicles		#	Estimated Cost Per Vehicle	Total Cost
Buses	40' Clean Diesel	19	\$764,632	\$14,528,013
	Subtotal	19		\$14,528,013
Cutaway Vans	Ford Body on Chassis	19	\$266,753	\$5,068,308
	Subtotal	19		\$5,068,308
Service Vehicles	Ford Transit Van	2	\$49,246	\$98,492
	Ford Escape	2	\$35,748	\$71,497
	Subtotal	4		\$169,989
All	Total	42		\$19,766,310

Table 47. Prioritized List of Vehicles to be Replaced in FY2026

12-Year Buses				5-Year Cutaway Vans				Non-Revenue Vehicles			
ID	Year	Make	Model	ID	Year	Make	Model	ID	Year	Make	Model
737	2014	GILLIG H	40'					9753	2011	Ford	F350 Stake Bed
738	2014	GILLIG H	40'					9721	2012	Ford	F350 Pickup
739	2014	GILLIG H	40'					9722	2012	Ford	F350 Pickup
740	2014	GILLIG H	40'					9754	2012	Ford	F350 Pickup
1300	2014	Proterra Elec	35'					9755	2014	Ford	E250 Van
1301	2014	Proterra Elec	35'					9822	2017	Jeep	Cherokee
1304	2014	Proterra Elec	35'					9824	2017	Jeep	Cherokee
1305	2014	Proterra Elec	35'					9825	2017	Jeep	Cherokee
1306	2014	Proterra Elec	35'								
1307	2014	Proterra Elec	35'								
1308	2014	Proterra Elec	35'								

Table 48. Estimated Vehicle Replacement Costs in FY2026

Replacement Vehicles		#	Estimated Cost Per Vehicle	Total Cost
Buses	60' Clean Diesel	11	\$1,044,924	\$11,494,168
	Subtotal	11		\$11,494,168
Cutaway Vans	N/A			
	Subtotal	0		\$0
Service Vehicles	Ford Transit Van	1	\$52,201	\$52,201
	Ford Escape	3	\$37,893	\$113,680
	Subtotal	4		\$165,881
All	Total	15		\$11,660,049

Table 49. Prioritized List of Vehicles to be Replaced in FY2027

12-Year Buses				5-Year Cutaway Vans				Non-Revenue Vehicles			
ID	Year	Make	Model	ID	Year	Make	Model	ID	Year	Make	Model
								8105	2019	FORD	ESCAPE H
								8106	2019	FORD	ESCAPE H
								8107	2019	FORD	ESCAPE H
								8101	2019	FORD	F250 PICKUP
								8102	2019	FORD	TRANSIT 350 VAN
								8103	2019	FORD	TRANSIT 350 VAN
								8104	2019	FORD	TRANSIT 350 VAN

Table 50. Estimated Vehicle Replacement Costs in FY2027

Replacement Vehicles		#	Estimated Cost Per Vehicle	Total Cost
Buses	N/A			
	Subtotal	0		\$0
<hr/>				
Cutaway Vans	N/A			
	Subtotal	0		\$0
<hr/>				
Service Vehicles	Ford Transit Van	3	\$55,333	\$165,999
	Subtotal	3		\$165,999
<hr/>				
All	Total	3		\$165,999

6.4. ANALYSIS OF THE VEHICLE REPLACEMENT PLAN ON STATE OF GOOD REPAIR

This section describes the outcome of the vehicle replacement prioritization process (outlined in Chapter 5), based on the detailed capital budget found in WeGo's CIP and WeGo Twelve-Year Vehicle Replacement Plan. Facilities projects during the timeframe of this TAM Plan are addressed as well.

For each of WeGo's vehicle types (buses, Access cutaways, and service vehicles), the discussion to follow provides the following:

- A prioritized list of vehicles that are prioritized for replacement each year; and
- An analysis of state of good repair metrics for two investment scenarios:
 - A **CIP Scenario**, in which replacements take place as planned in the FY23-FY27 CIP
 - A **Zero-Investment Scenario** (for illustrative purposes)

For each type of vehicle, an analysis of the state of good repair is provided using two separate metrics: (1) age in relation to ULB and (2) a Prioritization Score (PS) based on vehicle age as well as mileage, discussed previously in Chapter 5. Charts for these two metrics are provided for both the Zero-Investment Scenario and the FY23-FY27 CIB Scenario.

For the **ULB Metric** the three categories of values are:

- **At or Past ULB:** In need of immediate replacement
- **Aging:** Within three years of reaching ULB, and therefore should be tracked for near future replacement and procurement
- **New:** Vehicles that are at least 4 years away from reaching ULB

For the **PS Metric** (which considers both age and mileage) values are grouped as follows:

- **High:** At or past ULB and/or high mileage and in need of immediate replacement
- **Medium:** Will require replacement in the near future
- **Low:** Low age and/or mileage. Low priority for replacement

6.4.1. Rolling Stock – Buses

Figure 20 and Figure 21 summarize the SGR performance under WeGo’s CIP Scenario for both the ULB metric and Prioritization Score (PS) metric. Based on WeGo’s forecast budgeting and vehicle replacement, WeGo will have 0 buses at or past ULB by FY2024 and 78% will be in the low priority category for replacement. Also, 0% of the bus fleet will be at a high PS level, translating to a high performance, reliable fleet.

Figure 20. ULB Metric for the Bus Fleet Under the CIP Scenario – FY22-FY27

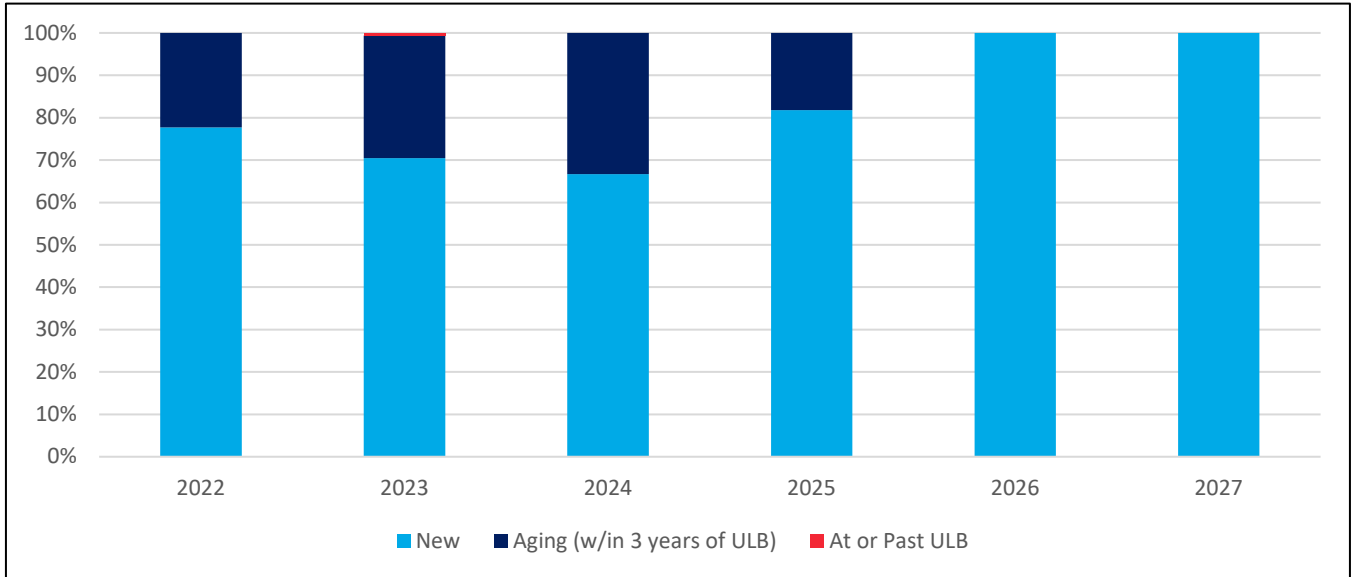


Figure 21. PS Metric for the Bus Fleet Under the CIP Scenario – FY22-FY27

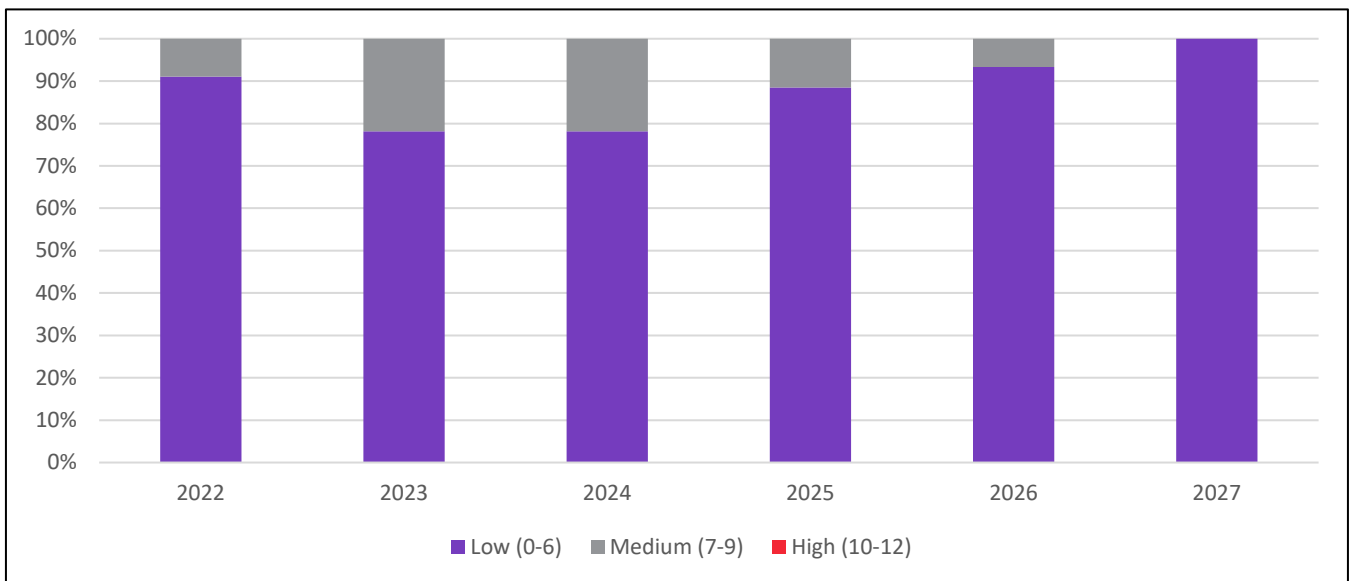


Figure 22 and Figure 23 illustrate the outcomes of the ULB metric and Prioritization Score (PS) metric for a Zero Investment Scenario for the bus fleet. In the Zero Investment scenario, by 2026, 30% of the fleet will have met or exceeded the ULB and almost 50% of the fleet will have medium or high PS values. Even though this scenario is not realistic as WeGo continues to invest in its bus fleet, this scenario highlights the importance of SGR funding for WeGo to maintain a state of good repair and ultimately, high levels of customer service and reliability.

Figure 22. ULB Metric for the Bus Fleet Under a Zero-Investment Scenario – FY23-FY27

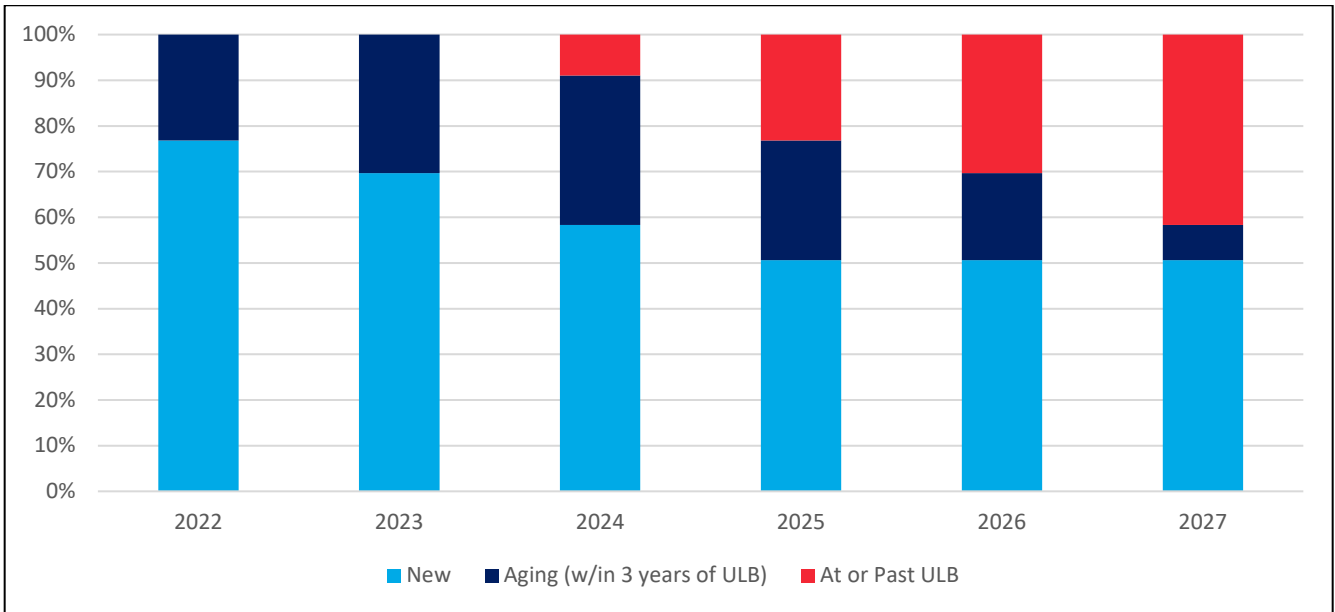
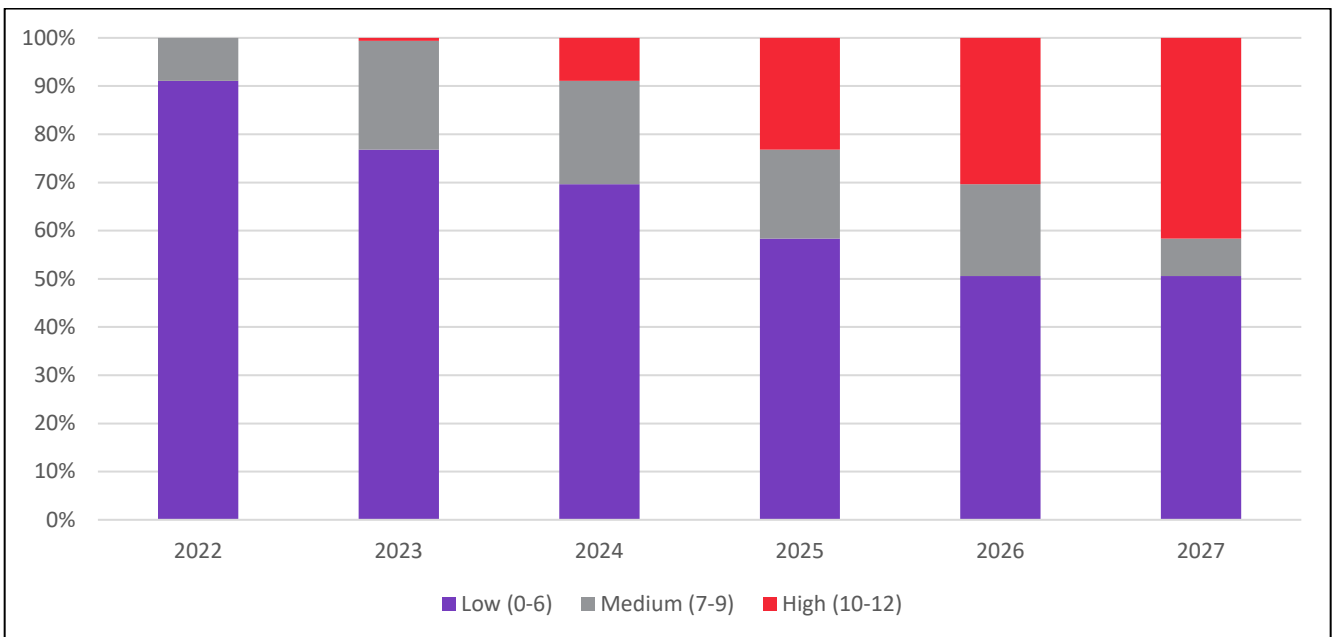


Figure 23. PS Metric for the Bus Fleet Under a Zero-Investment Scenario – FY23-FY27



6.4.2. Rolling Stock - Cutaway Vans

Figure 24 and Figure 25 summarize the ULB and PS metrics for the cutaway fleet under the WeGo CIP Scenario. Based on this budget forecast, after a long delay in securing replacement cutaways due to supply chain issues, WeGo will finally have 0 cutaways at or past their ULB by 2025. Also, 80% of its fleet will be in a low PS score, translating to a high performing, reliable fleet.

Figure 24. ULB Metric for Cutaway Vans Under the CIP Scenario – FY22-FY27

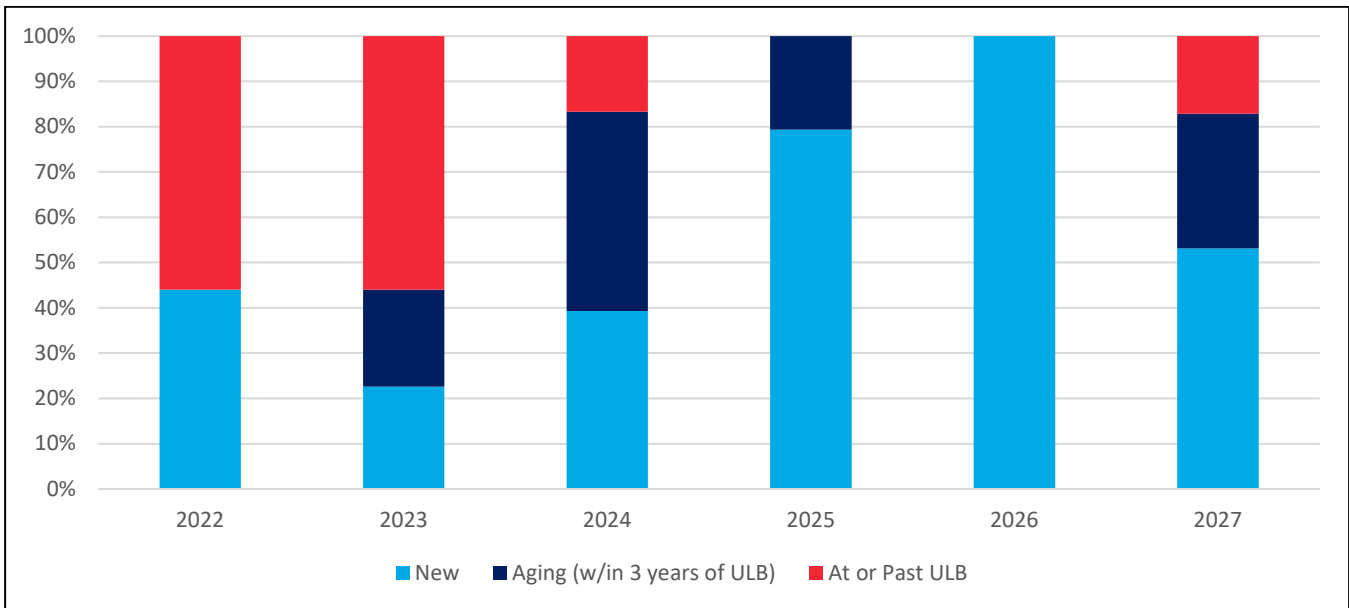


Figure 25. PS Metric for Cutaway Vans Under the CIP Scenario – FY22-FY27

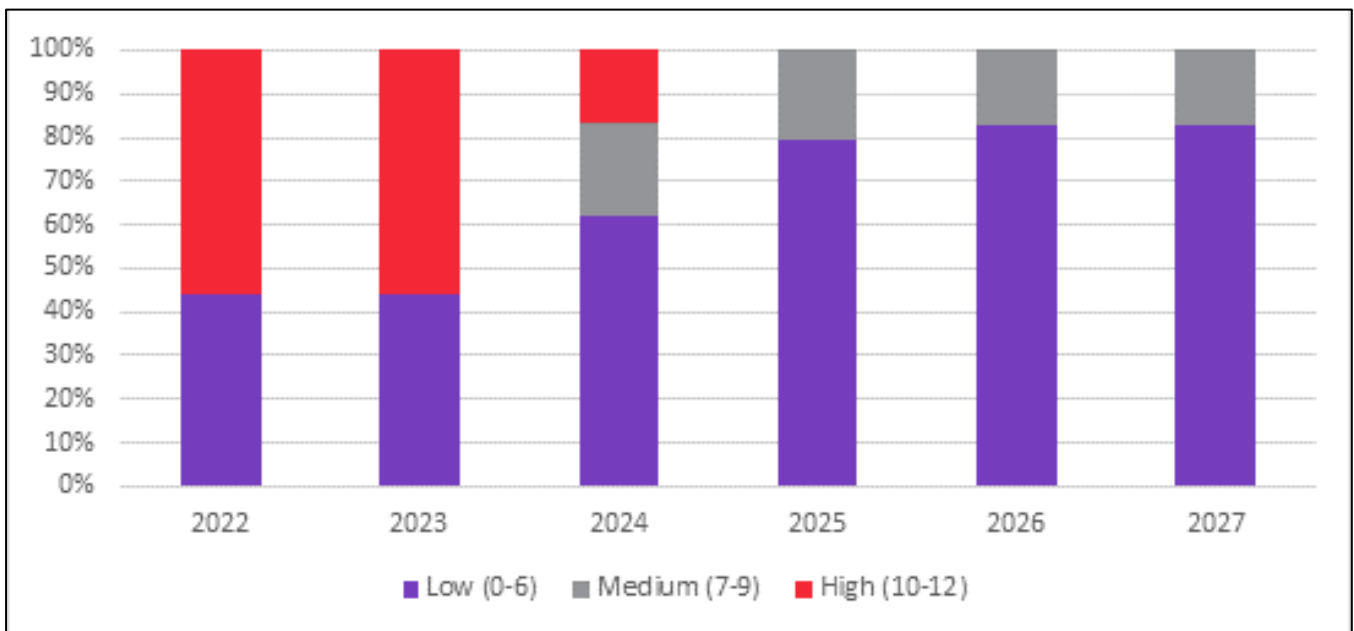


Figure 26 and Figure 27 illustrate the ULB metric and the Priority Score metric for the cutaway fleet’s Zero Investment Scenario. In this scenario, by 2026, 80% of the fleet will have met or exceeded the ULB and 100% of the fleet will have medium or high PS values. Even though this scenario is not realistic and WeGo plans to invest in its bus fleet, this scenario highlights the importance of SGR investment.

Figure 26. ULB Metric for the Cutaway Van Fleet Under a Zero-Investment Scenario – FY22-FY27

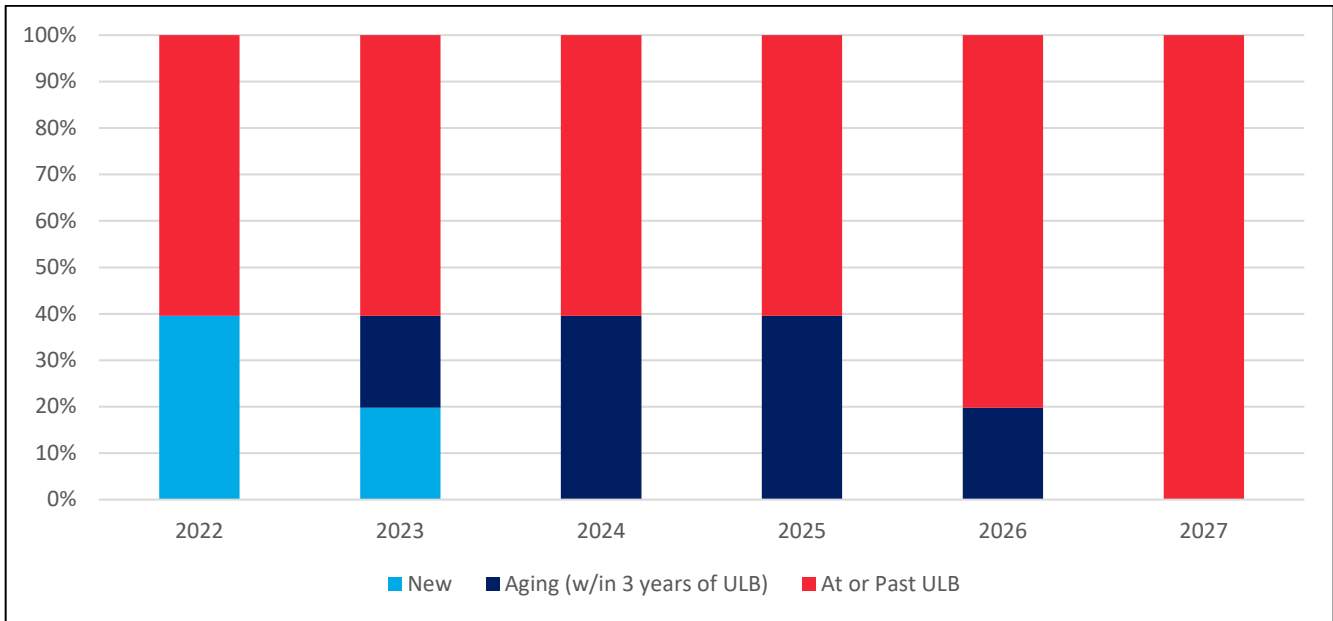
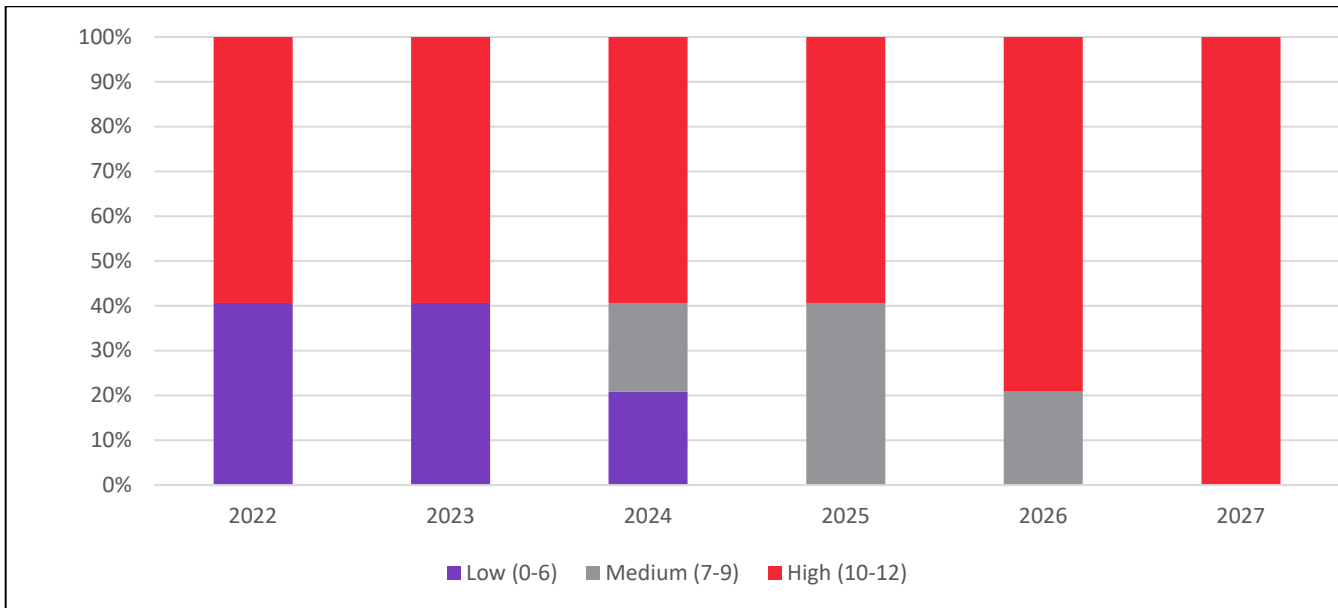


Figure 27. PS Metric for the Cutaway Van Fleet Under a Zero-Investment Scenario– FY22-FY27



6.5. EQUIPMENT

6.5.1. Service Vehicles

Figure 28 and Figure 29 summarize the ULB and PS metrics for service vehicles under the CIB. Based on this prioritization, WeGo will achieve its 60% SGR target for service vehicles. Also, there will be only 32% of its fleet in high PS level, translating to a high performance, reliable fleet.

Figure 28. ULB Metric for Service Vehicles Under the CIP Scenario – FY22-FY27

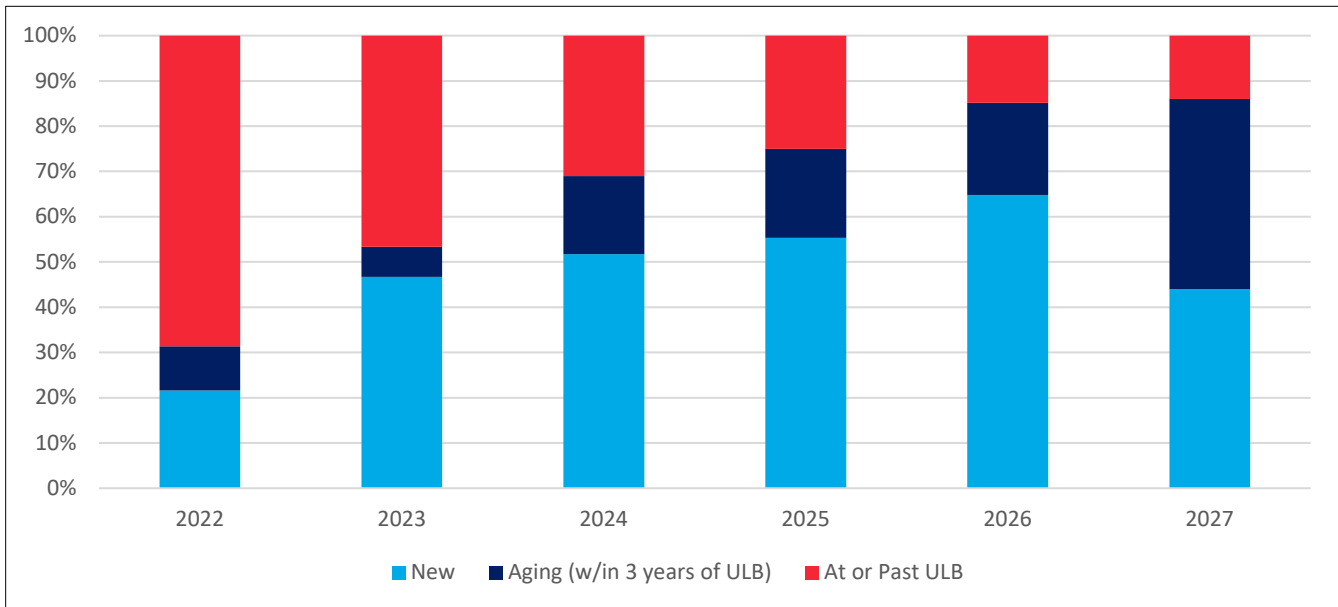


Figure 29. PS Metric for Service Vehicles Under the CIP Scenario – FY22-FY27

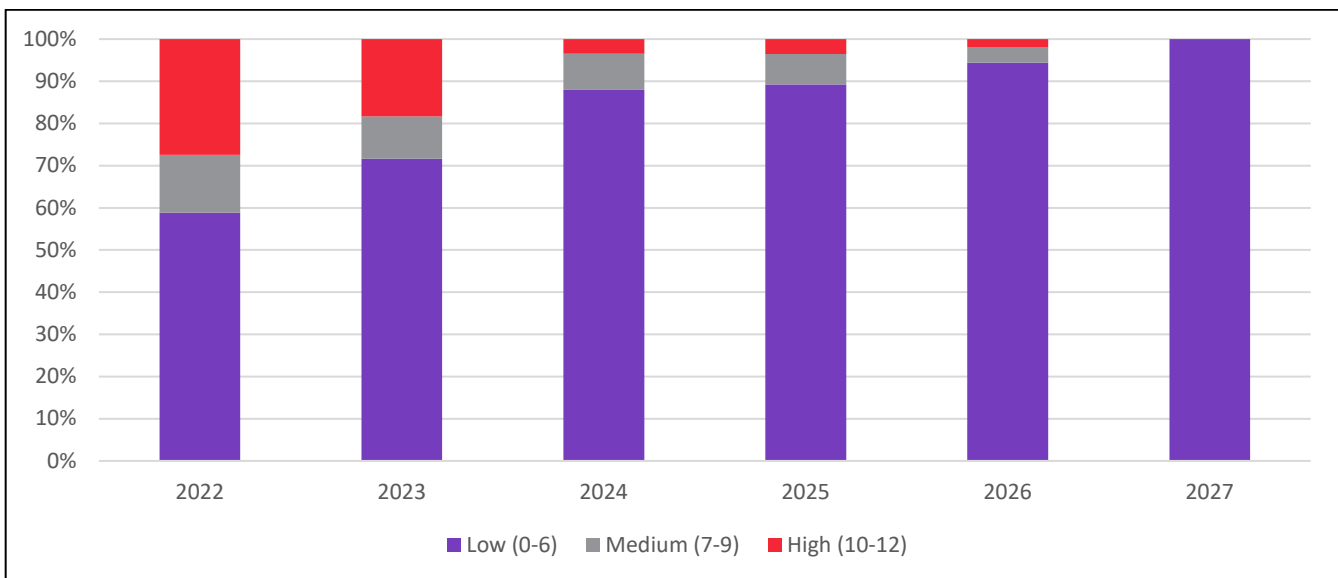


Figure 30 and Figure 31 illustrate the ULB and PS metrics for the Zero Investment Scenario for the non-revenue service vehicle fleet. In this scenario, by 2022, 88% of the fleet will have met or exceeded the ULB and 59% of the fleet will have high PS values. Even though this scenario is not realistic and WeGo plans to invest in its service fleet, this scenario highlights the importance of ongoing SGR investment.

Figure 30. ULB Metric for Service Vehicles Under a Zero-Investment Scenario – FY22-FY27

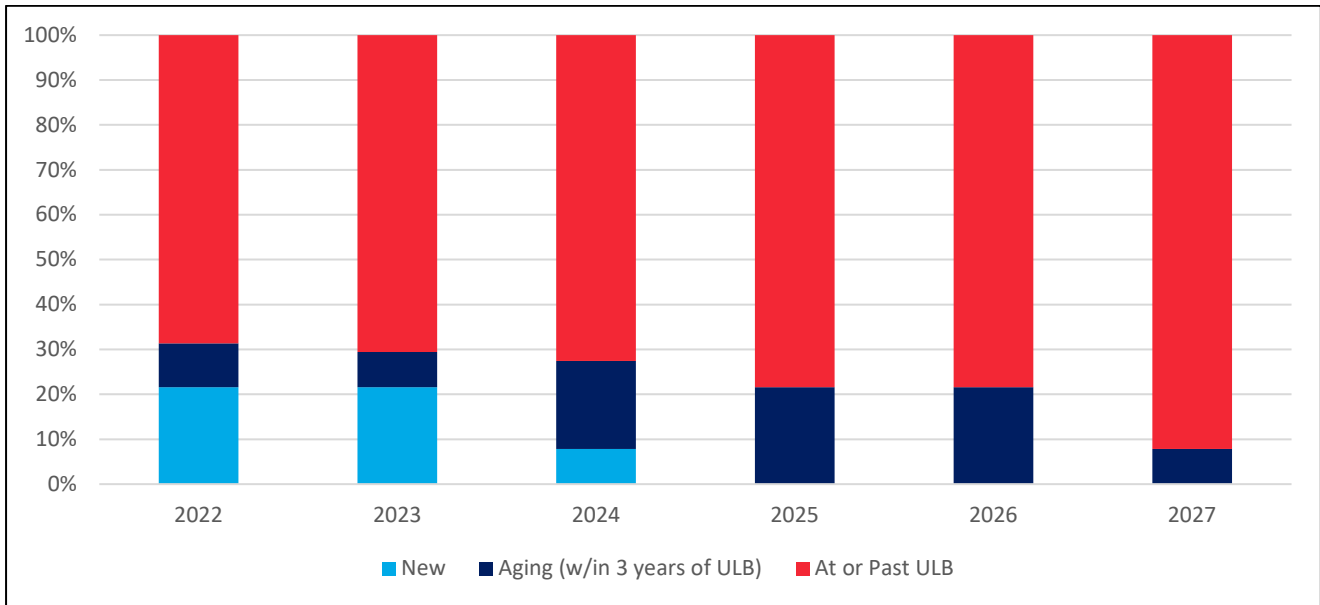
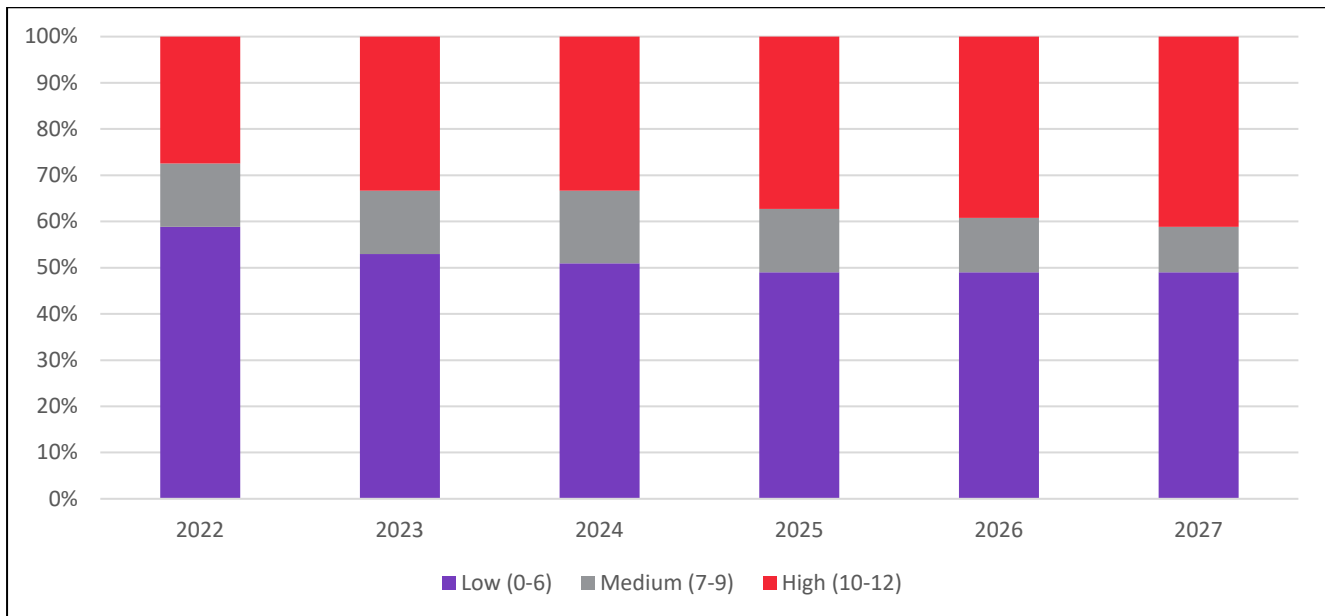


Figure 31. PS Metric for Service Vehicles Under a Zero-Investment Scenario – FY22-FY27



6.5.2. Prioritized Non-vehicular Equipment Projects

In addition to vehicles, a number of other equipment expenditures are prioritized for FY23 to FY27, as shown in Table 51.

Table 51. Prioritized Non-Vehicular Equipment Investments- FY23-FY27

Project	2023	2024	2025	2026	2027
Information technology routine equipment replacement	\$450,000	\$550,000	\$450,000	\$450,000	\$450,000
On board and on-street IT equipment replacement	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Bus stop amenities replacement	\$650,311	\$298,831	\$766,035	\$395,808	\$276,876
Paratransit dispatching/scheduling software upgrade	-	\$3,000,000	-	-	-
Enterprise asset management (EAM) and Enterprise Resource Planning	\$250,000	\$2,000,000	-	-	-
Apprentice training program equipment	\$200,000	\$200,000	\$150,000	\$150,000	\$125,000
Employee engagement and information portal	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Shelter expansion/upgrade program	\$3,000,000	\$3,000,000	\$2,200,000	\$2,200,000	\$2,200,000
Enhanced vehicle location tracking at Central and Nestor	\$2,000,000	-	-	-	-

6.6. PRIORITIZED FACILITY PROJECTS

WeGo's list of capital projects at facilities is based on the SGR goals and recommendations of the maintenance management team. The short- and long-term goals of the capital program for facilities are:

- Elevate facilities to the State of Good Repair (SGR) and achieve the SGR targets for facilities
- Ensure facilities can support operational capacity
- Improve customer experience at WeGo facilities
- Reduce the risk of emergency projects
- Create a comfortable work environment for WeGo staff

WeGo understands the consequences of funding these projects that can lead to delays in delivering program goals, including a loss in operational capacity, and exposed risk due to infrastructure degradation. To this end, priority was given to completing ongoing or existing projects that are critical to the operation of WeGo. Also, priority was given to the projects that increase operational movement and capacity, and projects that reduce the risk of future emergency projects.

WeGo facilities projects for FY2023 and FY2024 are described briefly below and summarized below

in Table 52. Projects included in these tables were derived from the Five Year Capital Investment Plan. While WeGo owns the state garage property, the State of Tennessee is contractually obligated to maintain the property.

Table 52. Prioritized Projects for WeGo Facilities - FY23-FY27

Project	FY23-FY27
Nestor Facility Phased Maintenance and Site Rehabilitation/Upgrade Projects	\$8,750,000
Facility Maintenance and Capital Replacement	\$8,600,000
Replace outdoor pavilions at Central	\$400,000
Replacement of electric signage at bus bays, lobby, and waiting areas at Central	\$2,500,000



Chapter 7

TAM IMPLEMENTATION STRATEGY AND KEY ACTIVITIES

TAM is a series of processes and an organizational stewardship culture tailored to preserving the public transit assets through their lifecycle at an optimized cost. A successful, mature TAM practice continuously improves itself through documentation of the gaps and reevaluation of its progress toward the desired maturity level on an ongoing basis. Table 53 outlines an implementation roadmap that is aligned with its TAM vision and policies. The roadmap was developed through a collaborative effort with the Transit Asset Management Working Group and reflects their plan for advancing the TAM practice at the agency.



Table 53. TAM Implementation Roadmap: Policies, Goals, and Key Activities

Policy Area	Goals	Key Activities
Planning		
<p>Provide agency-wide direction, fulfill all FTA requirements, and strive for continuous improvement in asset management practices.</p>	<ul style="list-style-type: none"> ■ Fulfill all FTA planning and reporting requirements per 49 CFR § 625 ■ Ensure that the agency has well-defined vision, policies and goals, and that these are reviewed as part of the continuous improvement plan ■ Align asset management and safety management practices 	<ul style="list-style-type: none"> ■ Report annually to FTA’s National Transit Database (NTD) ■ Review TAM Plan annually and revise if necessary. ■ Communicate SGR targets to TDOT and GNRC ■ Plan to revise the TAM Plan again in FY26. ■ Continue coordination with the Public Transit Agency Safety Plan (PTASP).
Efficiency and Safety		
<p>Proactively manage assets to improve operational efficiency and safety.</p>	<ul style="list-style-type: none"> ■ Maintain vehicles, equipment, systems, and facilities in a state of good repair ■ Develop and implement asset replacement and rehabilitation plans. ■ Develop and implement programs of preventive maintenance for capital assets ■ Use asset data and subject matter expertise to identify recurring issues, reduce road calls, and move toward a proactive management of assets 	<ul style="list-style-type: none"> ■ Execute the Capital Improvement Program to keep assets in a state of good repair. ■ Use information obtained during the 2022 facility assessments to generate projects for inclusion in the work program. ■ Monitor supply chain conditions impacting production and delivery of rolling stock. Plan procurements sufficiently far in advance so that delivery can occur within the target time frame.
Fiscal Sustainability		
<p>Foster financial sustainability by implementing asset management and promoting the TAM culture at the agency</p>	<ul style="list-style-type: none"> ■ Preserve current assets while planning for replacement and additions ■ Develop WeGo’s annual budgeting process and Capital Improvement Program (CIP) in alignment with SGR targets in this TAM Plan ■ Utilize objective methods to prioritize capital projects ■ Ensure investment decisions are transparent and clearly communicated 	<ul style="list-style-type: none"> ■ Continue preparing the Five-Year Capital Investment Plan annually in conjunction with the annual budgeting process. ■ Maintain the 12-Year Vehicle Replacement spreadsheet to keep data current. ■ Monitor the impacts of inflation on future purchasing power.

Policy Area	Goals	Key Activities
Human Capital		
<p>Promote asset management culture at WeGo and develop the human capital necessary for TAM implementation</p>	<ul style="list-style-type: none"> ■ Document and manage organizational knowledge and lessons-learned ■ Recruit, develop, and retain well-trained TAM workforce ■ Develop a succession plan for key roles at the agency 	<ul style="list-style-type: none"> ■ Continue documentation of all standard operating procedures (SOPs) ■ Incorporate sufficient training in the implementation plan for using the enterprise asset management (EAM) system
Data and Tools		
<p>Support data-driven decision-making through the use of analytical tools and reliable data.</p>	<ul style="list-style-type: none"> ■ Collect relevant, timely, and accurate data to support decision-making ■ Develop data management protocols to reduce redundancy while following information security standards ■ Assess and implement tools to support data driven asset management decisions ■ Utilize historical data to identify recurring issues and failures 	<ul style="list-style-type: none"> ■ Complete development of the facility asset management system in Oracle Unifier. ■ After the preliminary study of EAM needs is complete, procure an EAM solution for vehicle asset management. ■ In conjunction with Operations and the EAM implementation, explore transitioning to a tablet-based system of tracking maintenance routines.



Chapter 8

MONITORING AND CONTINUOUS IMPROVEMENT PLAN

WeGo's Capital Planning Advisory Group will take the lead in monitoring ongoing TAM activities to ensure the TAM plan is being implemented and that the agency is making progress toward its TAM and SGR targets. As discussed in more depth in Chapter One, this group includes the following stakeholders:

- Chief Development Officer
- Chief Operating Officer
- Deputy COO of Operations Systems
- Director of Planning
- Director of Maintenance
- Vehicle Maintenance Manager
- Director of System & Risk Management
- Facilities Maintenance Manager
- Accounting Manager
- Capital Grants Administrator
- IT Manager
- Transit Business Analyst

The Capital Planning Advisory Group will meet on a quarterly basis to evaluate ongoing TAM processes, implementation costs, and benefits. The Group will discuss the progress of the implementation plan and any potential barriers in achieving the planned timelines and goals. In addition, in collaboration with the various functional units at WeGo, the Group will ensure that sufficient resources are assigned to each activity. The Group may decide to revise the implementation plan or reallocate resources among several activities based on the feedback from the agency staff.

The Capital Planning Advisory Group will conduct a TAM self-assessment on an annual basis by engaging appropriate staff. The self-assessment will involve checking progress toward TAM goals, reviewing SGR targets, and revising policies or the implementation plan or, if necessary. The results of these annual assessments can provide valuable insight into the effectiveness of the TAM Plan implementation and can inform the decisions about priorities and allocation of resources.



Appendix A

COMPLIANCE WITH FTA FINAL RULE (49 CFR 625)



FEDERAL TRANSIT ADMINISTRATION

Am I in Compliance with the TAM Final Rule?

The following checklist is for recipients and subrecipients of federal financial assistance that own, operate, or manage capital assets in the provision of public transportation. To determine which of these provisions apply to your agency, use the [Am I a Tier I or Tier II agency?](#), [Group Plan Sponsor](#), and [Group Plan Participant](#) checklists. For questions about applicability and requirements of the TAM rule not addressed in this checklist, please see the [TAM FAQs](#).

Tier I and Tier II recipients and Group Plan Sponsors

Complete?

- | | |
|---|-------------------------------------|
| 1. Do I have a TAM plan that covers a four year period? | <input checked="" type="checkbox"/> |
| 2. Was the TAM plan updated within the last four years? | <input checked="" type="checkbox"/> |
| 3. Do I have a TAM plan that includes all of the required elements? (Tier I providers and group plan sponsors, see applicable sections.) | <input checked="" type="checkbox"/> |
| a. An <u>asset inventory</u> for all assets used in the provision of <u>public transportation</u> , including those owned by third parties? | <input checked="" type="checkbox"/> |
| b. A <u>condition assessment</u> of all assets in my asset inventory for which I have direct capital responsibility. | <input checked="" type="checkbox"/> |
| c. An <u>investment prioritization</u> that: | <input checked="" type="checkbox"/> |
| • Ranks projects to improve or manage the state of good repair over the horizon period, | |
| • Includes all capital assets for which I have direct capital responsibility, and | |
| • Is at the asset class level | <input checked="" type="checkbox"/> |
| d. Did I document the analytical processes and <u>decision support tools</u> used in developing my TAM plan? | <input checked="" type="checkbox"/> |
| 4. Do I have documentation that I calculated performance for: | |
| <u>Equipment</u> (non-revenue service vehicles): the percentage of those vehicles that have either met or exceeded their ULB for all assets for which I have direct capital responsibility. | <input checked="" type="checkbox"/> |
| <u>Rolling Stock</u> (revenue vehicles): the percentage of revenue vehicles by vehicle type that have either met or exceeded their ULB for all assets for which I have direct capital responsibility. | <input checked="" type="checkbox"/> |
| <u>Infrastructure</u> (rail fixed-guideway, track, signals, and systems): the percentage of track segments with performance restrictions for all assets for which I have direct capital responsibility. | <input type="checkbox"/> NA |
| <u>Facilities</u> : the percentage of facilities within an asset group rated below condition 3 on the TERM scale for all assets for which I have direct capital responsibility. Condition assessments have been conducted within the last four years. | <input checked="" type="checkbox"/> |



FEDERAL TRANSIT ADMINISTRATION

Complete?

5. Do I have documentation that I set performance targets annually to project the following fiscal year for:
- Equipment
 - Rolling Stock
 - Infrastructure NA
 - Facilities
6. Did my Accountable Executive approve the performance targets?
7. Did I make my TAM plan, any supporting records or documents, performance targets, investment strategies, and the annual condition assessment report available to the State and/or MPO that provides my funding?

Group Plan Sponsors

The below questions relate to all assets in a group plan inventory which include all participants' assets.

8. Did I create a group plan for participants that meets the associated requirements? NA
- a. Does the group plan include a list of participants?
 - b. Have I ensured that each participant is included in only one group plan?
 - c. Have I received and maintained documentation of opt-outs?
 - d. Have I ensured that each of my subrecipients is either participating in a group plan or has developed its own plan?
 - e. Have I received all necessary and relevant information from participants?
 - f. Have I coordinated the TAM plan development process with all participants' Accountable Executives?
 - g. Have I made the plan available in an easily accessible format to participants?
 - h. Do I have documentation that I set unified performance targets annually to project the following fiscal year that covers all assets in the group plan inventory?
 - i. Did I make my sponsored Group TAM documents available to the State and/or MPO that provides funding to any of my group plan participants?



FEDERAL TRANSIT ADMINISTRATION

Tier I Recipients

Complete?

For questions related to group plan sponsors see the previous section, even if you are a tier I operator as well as a group plan sponsor. The below questions apply to the individual tier I plan assets.

9. Do I have a tier I TAM plan that includes all of the required elements?
- Documentation of a TAM and SGR policy?
 - An implementation strategy that outlines a plan to achieve its asset management goals?
 - A written description of the key annual activities needed to implement the TAM plan for each year of the plan's horizon?
 - A summary or list of the resources, including personnel, that the recipient needs to develop and carry out the TAM plan?
 - An evaluation plan that outlines how I will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure the continuous improvement of its TAM practices?

Once you can answer yes to the above questions, your agency should be in compliance with the transit asset management final rule.

Resources

Checklists:

- [Am I Tier I or a Tier II agency?](#)
- [Am I required to be a Group TAM Plan sponsor?](#)
- [Am I going to be a participant in a Group TAM Plan?](#)

Performance measures:

- [TAM Infrastructure Performance Measure Reporting Guidebook](#)
- [TAM Facility Performance Measure Reporting Guidebook](#)
- [Transit Asset Management Guide](#)
- [TAM Performance Measures Fact Sheet](#)

Reporting to NTD:

- [TAM NPRM and NTD Guidance Crosswalk](#)
- [NTD Policy Manuals](#)
- [NTD Annual Reporting User Guide](#)

Definitions:

Public Transportation is defined by law as "regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income." 49 U.S.C. § 5302(14).



FEDERAL TRANSIT ADMINISTRATION

Updated October 2021

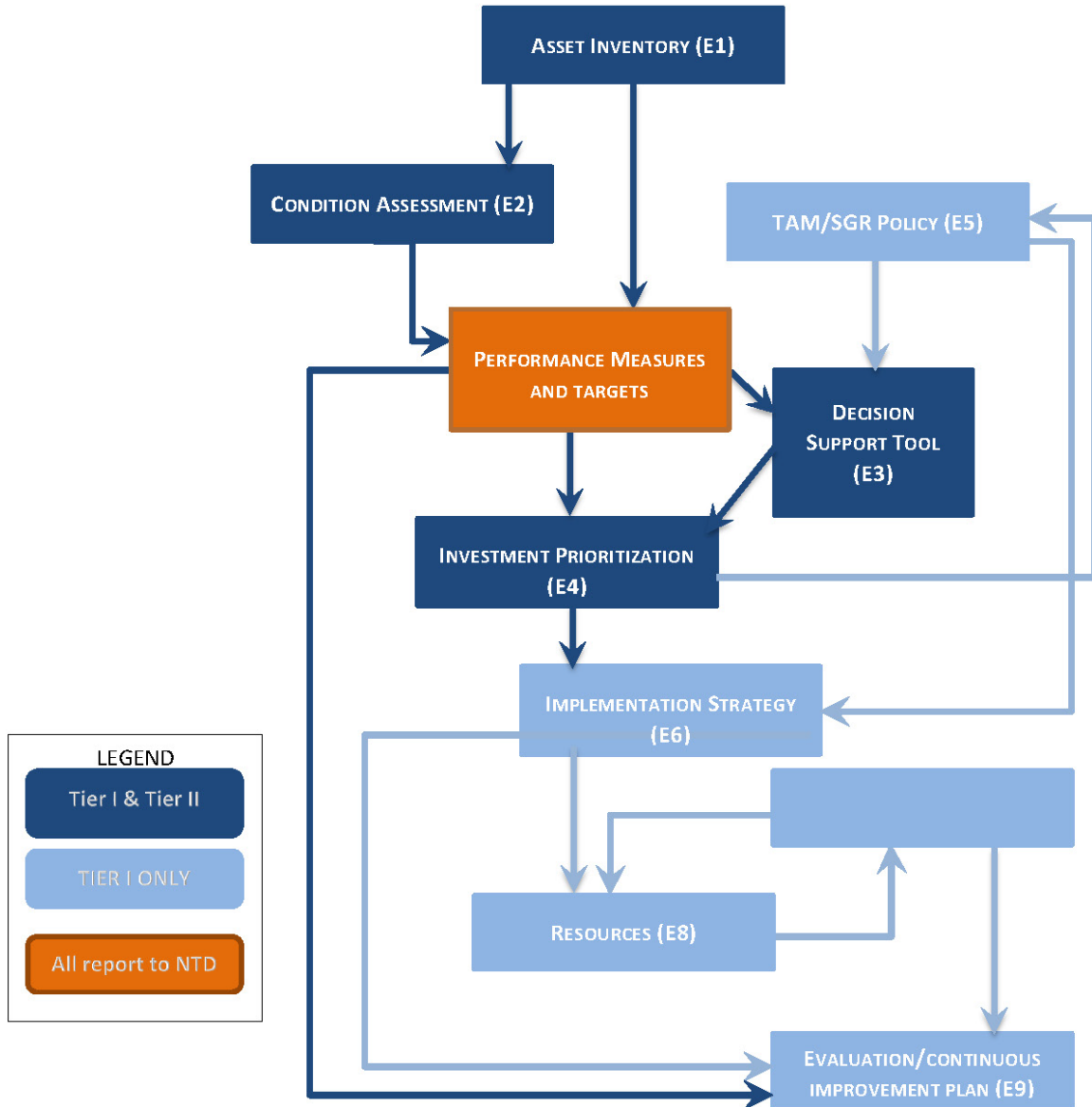
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FTA

FEDERAL TRANSIT ADMINISTRATION

Relation between TAM Plan Elements

The graphic below shows the logical relationship between TAM plan elements for tier I and tier II agencies. While this graphic does not indicate relationships required by the rule, following the flow of the graphic will encourage consistency between plan elements and plan that meets all requirements.



LEGEND

- Tier I & Tier II
- TIER I ONLY
- All report to NTD



FEDERAL TRANSIT ADMINISTRATION

Applicable TAM Rule Language:

§ 625.25 Transit Asset Management Plan Requirements.

(a) General.

(1) Each tier I provider must develop and carry out a TAM plan that includes each element under subsection (b) of this section.

(2) Each tier II provider must develop its own TAM plan or participate in a group TAM plan. A tier II provider's TAM plan and a group TAM plan only must include elements (1)-(4) under subsection (b) of this section.

(3) A provider's Accountable Executive is ultimately responsible for ensuring that a TAM plan is developed and carried out in accordance with this part.

(b) Transit asset management plan elements. Except as provided in subsection (a)(3) of this section, a TAM plan must include the following elements:

(1) An inventory of the number and type of capital assets. The inventory must include all capital assets that a provider owns, except equipment with an acquisition value under \$50,000 that is not a service vehicle. An inventory also must include third-party owned or jointly procured exclusive-use maintenance facilities, passenger station facilities, administrative facilities, rolling stock, and guideway infrastructure used by a provider in the provision of public transportation. The asset inventory must be organized at a level of detail commensurate with the level of detail in the provider's program of capital projects;

(2) A condition assessment of those inventoried assets for which a provider has direct capital responsibility. A condition assessment must generate information in a level of detail sufficient to monitor and predict the performance of the assets and to inform the investment prioritization;

(3) A description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization;

(4) A provider's project-based prioritization of investments, developed in accordance with section 625.33 of this part;

(5) A provider's TAM and SGR policy;

(6) A provider's TAM plan implementation strategy;

(7) A description of key TAM activities that a provider intends to engage in over the TAM plan horizon period;

(8) A summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM plan; and



(9) An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure the continuous improvement of its TAM practices.

§ 625.29 Transit asset management plan: horizon period, amendments, and updates.

(a) Horizon period. A TAM plan must cover a horizon period of at least four (4) years.

(b) Amendments. A provider may update its TAM plan at any time during the TAM plan horizon period. A provider should amend its TAM plan whenever there is a significant change to the asset inventory, condition assessments, or investment prioritization that the provider did not reasonably anticipate during the development of the TAM plan.

(c) Updates. A provider must update its entire TAM plan at least once every four (4) years. A provider's TAM plan update should coincide with the planning cycle for the relevant Transportation Improvement Program or Statewide Transportation Improvement Program.

§ 625.31 Implementation deadline.

(a) A provider's initial TAM plan must be completed no later than two years after the effective date of this part.

(b) A provider may submit in writing to FTA a request to extend the implementation deadline. FTA must receive an extension request before the implementation deadline and will consider all requests on a case-by-case basis.

§ 625.33 Investment prioritization

(f) When developing its investment prioritization, a provider must take into consideration requirements under 49 CFR 37.161 and 37.163 concerning maintenance of accessible features and the requirements under 49 CFR 37.43 concerning alteration of transportation facilities.

§ 625.45 Setting performance targets for capital assets.

(a) General.

(1) A provider must set one or more performance targets for each applicable performance measure.

(2) A provider must set a performance target based on realistic expectations, and both the most recent data available and the financial resources from all sources that the provider reasonably expects will be available during the TAM plan horizon period.

(b) Timeline for target setting.

(1) Within three months after the effective date of this part, a provider must set performance targets for the following fiscal year for each asset class included in its TAM plan.



FEDERAL TRANSIT ADMINISTRATION

(2) At least once every fiscal year after initial targets are set, a provider must set performance targets for the following fiscal year.

(c) Role of the accountable executive. A provider's Accountable Executive must approve each annual performance target.

(d) Setting performance targets for group plan participants.

(1) A Sponsor must set one or more unified performance targets for each asset class reflected in the group TAM plan in accordance with subsections (a)(2) and (b) of this section.

(2) To the extent practicable, a Sponsor must coordinate its unified performance targets with each participant's Accountable Executive.

(e) Coordination with metropolitan, statewide and non-metropolitan planning processes. To the maximum extent practicable, a provider and Sponsor must coordinate with States and Metropolitan Planning Organizations in the selection of State and Metropolitan Planning Organization performance targets.



Appendix B

FTA USEFUL LIFE BENCHMARKS



FEDERAL TRANSIT ADMINISTRATION

Default Useful Life Benchmark (ULB) Cheat Sheet

Source: 2017 Asset Inventory Module Reporting Manual, Page 53

Transit Agencies will report the age of all vehicles to the National Transit Database. FTA will track the performance of revenue vehicles (Rolling Stock) and service vehicles (Equipment), by asset class, by calculating the percentage of vehicles that have met or exceeded the useful life benchmark (ULB).

FTA has set a default ULB as the expected service years for each vehicle class in the table below. ULB is the average age-based equivalent of a 2.5 rating on the FTA Transit Economic Requirements Model (TERM) scale. Transit agencies can adjust their Useful Life Benchmarks with approval from FTA.

Vehicle Type	Default ULB (in years)
AB Articulated bus	14
AG Automated guideway vehicle	31
AO Automobile	8
BR Over-the-road bus	14
BU Bus	14
CC Cable car	112
CU Cutaway bus	10
DB Double decked bus	14
FB Ferryboat	42
HR Heavy rail passenger car	31
IP Inclined plane vehicle	56
LR Light rail vehicle	31
MB Minibus	10
MO Monorail vehicle	31
MV Minivan	8
Other rubber tire vehicles	14
RL Commuter rail locomotive	39
RP Commuter rail passenger coach	39
RS Commuter rail self-propelled passenger car	39
RT Rubber-tired vintage trolley	14
SB School bus	14
Steel wheel vehicles	25
SR Streetcar	31
SV Sport utility vehicle	8
TB Trolleybus	13
TR Aerial tramway	12
VN Van	8
VT Vintage trolley	58



FEDERAL TRANSIT ADMINISTRATION



Appendix C

ROLLING STOCK INVENTORY

WeGo Bus Inventory as of June 2022

VEHICLE ID	MAKE	SUB-FLEET	VIN NUMBER	ODOMETER
182	NABI	2009 NABI 180 NABI HYBRID	1N96020948A140630	181,076
186	NABI	2010 NABI 186 NABI HYBRID	1N9602098AA140121	390,398
187	NABI	2010 NABI 186 NABI HYBRID	1N960209XAA140122	423,371
188	NABI	2010 NABI 186 NABI HYBRID	1N9602091AA140123	387,298
189	NABI	2010 NABI 186 NABI HYBRID	1N9602093AA140124	373,904
190	NABI	2010 NABI 186 NABI HYBRID	1N9602095AA140125	452,549
191	NABI	2010 NABI 186 NABI HYBRID	1N9602097AA140126	440,069
192	NABI	2010 NABI 186 NABI HYBRID	1N9602099AA140127	427,276
193	NABI	2010 NABI 186 NABI HYBRID	1N9602090AA140128	379,999
194	NABI	2010 NABI 186 NABI HYBRID	1N9602092AA140129	411,933
195	NABI	2010 NABI 186 NABI HYBRID	1N9602099AA140130	378,063
196	NABI	2010 NABI 186 NABI HYBRID	1N9602090AA140131	417,891
197	NABI	2010 NABI 186 NABI HYBRID	1N9602092AA140132	419,168
198	NABI	2010 NABI 186 NABI HYBRID	1N9602094AA140133	417,963
199	NABI	2010 NABI 186 NABI HYBRID	1N9602096AA140134	410,822
700	GILLIG	2011 GILLIG 700 GILLIG	15GGD2711B1179751	359,199
701	GILLIG	2011 GILLIG 700 GILLIG	15GGD2713B1179752	387,592
702	GILLIG	2011 GILLIG 700 GILLIG	15GGD2715B1179753	416,746
703	GILLIG	2011 GILLIG 700 GILLIG	15GGD2717B1179754	483,892
704	GILLIG	2011 GILLIG 700 GILLIG	15GGD2719B1179755	475,258
705	GILLIG	2011 GILLIG 700 GILLIG	15GGD2710B1179756	263,851
706	GILLIG	2011 GILLIG 700 GILLIG	15GGD2712B1179757	467,466
707	GILLIG	2011 GILLIG 700 GILLIG	15GGD2714B1179758	494,225
708	GILLIG	2011 GILLIG 700 GILLIG	15GGD2716B1179759	465,169
709	GILLIG	2011 GILLIG 700 GILLIG	15GGD2712B1179760	476,301
710	GILLIG	2011 GILLIG 700 GILLIG	15GGD2714B1179761	479,558
711	GILLIG	2011 GILLIG 700 GILLIG	15GGD2716B1179762	462,301
712	GILLIG	2011 GILLIG 700 GILLIG	15GGD2718B1179763	480,733
713	GILLIG	2011 GILLIG 700 GILLIG	15GGD271XB1179764	251,097
715	GILLIG	2011 GILLIG 700 GILLIG	15GGD2713B1179766	491,940
716	GILLIG	2011 GILLIG 700 GILLIG	15GGD2715B1179767	498,897
717	GILLIG	2011 GILLIG 700 GILLIG	15GGD2717B1179768	501,309
718	GILLIG	2011 GILLIG 700 GILLIG	15GGD2719B1179769	461,894
719	GILLIG	2011 GILLIG 700 GILLIG	15GGD2715B1179770	491,908
720	GILLIG	2011 GILLIG 700 GILLIG	15GGD2717B1179771	290,876
721	GILLIG	2011 GILLIG 700 GILLIG	15GGD2719B1179772	435,660
722	GILLIG	2011 GILLIG 700 GILLIG	15GGD2710B1179773	402,872
723	GILLIG	2011 GILLIG 700 GILLIG	15GGD2712B1179774	482,973
724	GILLIG	2011 GILLIG 700 GILLIG	15GGD2714B1179775	498,457
725	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3016C1181531	446,428
726	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3018C1181532	460,499

VEHICLE ID	MAKE	SUB-FLEET	VIN NUMBER	ODOMETER
727	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD301XC1181533	372,715
728	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3011C1181534	437,781
729	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3013C1181535	384,376
730	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3015C1181536	440,679
731	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3017C1181537	361,621
732	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3019C1181538	420,083
733	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3010C1181539	460,538
734	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3017C1181540	407,430
735	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3019C1181541	423,583
736	GILLIG	2012 GILLIG 725 GILLIG HYB	15GGD3010C1181542	448,739
120	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU17DB041605	355,363
121	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU19DB041606	370,938
122	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU10DB041607	323,281
123	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU12DB041608	386,396
124	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU14DB041609	349,582
125	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU10DB041610	361,646
126	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU12DB041611	318,458
127	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU14DB041612	343,015
128	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU16DB041613	400,126
129	NEW FLYER	2013 NEW FLYER 120 NF HYBRID	5FYH8YU18DB041614	315,133
130	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU1XDC043312	360,548
131	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU11DC043313	303,503
132	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU13DC043314	344,438
134	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU17DC043316	375,064
135	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU19DC043317	330,747
137	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU12DC043319	362,616
139	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU10DC043321	303,362
140	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU12DC043322	353,678
141	NEW FLYER	2013 NEW FLYER 130 NF HYBRID	5FYH8YU14DC043323	371,315
737	GILLIG	2014 GILLIG 737 GILLIG HYB	15GGD3017F1185821	303,841
738	GILLIG	2014 GILLIG 737 GILLIG HYB	15GGD3019F1185822	308,477
739	GILLIG	2014 GILLIG 737 GILLIG HYB	15GGD3010F1185823	264,448
740	GILLIG	2014 GILLIG 737 GILLIG HYB	15GGD3012F1185824	176,404
1300	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J9ES816065	44,368
1301	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J0ES816066	49,070
1302	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J2ES816067	55,083
1303	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J4ES816068	55,945
1304	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J2ES816069	44,873
1305	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J2ES816070	45,618
1306	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J4ES816071	32,428
1307	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J5FS816078	38,786
1308	PROTERRA	2014 PROTERRA 1300 PROTERRA	1M9TG16J7FS816079	47,963
1700	GILLIG	2017 GILLIG 40' BAE- HYBRID	15GGD3019H3189697	179,191

VEHICLE ID	MAKE	SUB-FLEET	VIN NUMBER	ODOMETER
1701	GILLIG	2017 GILLIG 40' BAE- HYBRID	15GGD3010H3189698	186,001
1702	GILLIG	2017 GILLIG 40' BAE- HYBRID	15GGD3012H3189699	171,613
1703	GILLIG	2017 GILLIG 40' BAE- HYBRID	15GGD3015H3189700	210,220
1760	NEW FLYER	2017 NEW FLYER 2017 60' FLYER	5FYH8YU14HF052186	163,109
1761	NEW FLYER	2017 NEW FLYER 2017 60' FLYER	5FYH8YU16HF052187	228,401
1762	NEW FLYER	2017 NEW FLYER 2017 60' FLYER	5FYH8YU18HF052188	214,194
1763	NEW FLYER	2017 NEW FLYER 2017 60' FLYER	5FYH8YU1XHF052189	221,066
1800	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3019J3191004	151,582
1801	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3010J3191005	172,048
1802	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3012J3191006	167,706
1803	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3014J3191007	190,155
1804	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3016J3191008	163,929
1805	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3018J3191009	80,728
1806	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3014J3191010	163,613
1807	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3016J3191011	167,099
1808	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3018J3191012	181,732
1809	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD301XJ3191013	189,305
1810	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3011J3191014	192,885
1811	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3013J3191015	93,708
1812	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3015J3191016	187,073
1813	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3017J3191017	168,223
1814	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3019J3191018	168,896
1815	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3010J3191019	191,261
1816	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3017J3191020	182,649
1817	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3019J3191021	177,592
1818	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3010J3191022	187,481
1819	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3012J3191023	176,539
1820	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3014J3191024	195,117
1821	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3016J3191025	193,104
1822	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3018J3191026	182,007
1823	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD301XJ3191027	192,736
1824	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3011J3191028	186,879
1825	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3013J3191029	189,286
1826	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD301XJ3191030	183,792
1827	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3011J3191031	130,309
1828	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3013J3191032	132,274
1829	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3015J3191033	128,750
1830	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3017J3191034	134,549
1900	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3011J3191773	164,280
1901	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3013J3191774	167,958
1902	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3015J3191775	161,736
1903	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3017J3191776	138,594
1904	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3019J3191777	169,340

VEHICLE ID	MAKE	SUB-FLEET	VIN NUMBER	ODOMETER
1905	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3010J3191778	159,214
1906	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3012J3191779	155,947
1907	GILLIG	2018 GILLIG 40' BAE- HYBRID	15GGD3019J3191780	139,672
1310	PROTERRA	2019 PROTERRA 1300 PROTERRA	7JZTG11J0KL000024	25,144
1311	PROTERRA	2019 PROTERRA 1300 PROTERRA	7JZTG11J2KL000025	25,735
1908	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3019K3191781	161,939
1909	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3010K3191782	153,888
1911	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3012K3191783	124,218
1912	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3016K3191784	111,128
1913	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3016K3191785	130,782
1914	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3018K3191786	126,685
1915	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD301XK3191787	132,134
1916	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3011K3191788	128,243
1917	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3013K3191789	126,741
1918	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD301XK3191790	67,532
1919	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3011K3191791	131,211
1920	GILLIG	2019 GILLIG 40' BAE- HYBRID	15GGD3013K3191792	120,555
2001	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2711L3194983	73,377
2002	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2713L3194984	50,746
2003	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2715L3194985	64,567
2004	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2717L3194986	75,968
2005	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2719L3194987	74,490
2006	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2710L3194988	75,287
2007	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2712L3194989	76,381
2008	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2719L3194990	69,927
2009	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2710L3194991	74,220
2010	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2712L3194992	70,890
2011	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2714L3194993	66,411
2012	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2716L3194994	76,768
2013	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2718L3194995	65,123
2014	GILLIG	2020 GILLIG 2000 GILLIG	15GGD271XL3194996	74,440
2015	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2711L3194997	85,068
2016	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2713L3194998	76,108
2017	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2715L3194999	56,766
2018	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2716L3195000	73,097
2019	GILLIG	2020 GILLIG 2000 GILLIG	15GGD2718L3195001	69,024
2164	NEW FLYER	2021 NEW FLYER	5FYD8YU1XMF075643	62,086
2165	NEW FLYER	2021 NEW FLYER	5FYD8YU11MF075644	71,863
2166	NEW FLYER	2021 NEW FLYER	5FYD8YU13MF075645	66,391
2167	NEW FLYER	2021 NEW FLYER	5FYD8YU15MF075646	46,512
2168	NEW FLYER	2021 NEW FLYER	5FYD8YU17MF075647	68,627

WeGo Cutaway Van Inventory as of June 2022

Vehicle	Make	Class	VIN Number	Odometer	Year
345	FORD	336 GLAVAL	1FDFF4FS4ADA84650	367,651	2010
346	FORD	346 GLAVAL HYB	1FDFF4FS9CDA02706	351,872	2012
348	FORD	346 GLAVAL HYB	1FEFF4FS3CDA02703	351,251	2012
349	FORD	346 GLAVAL HYB	1FDFF4FS0CDA02707	331,594	2012
350	FORD	346 GLAVAL HYB	1FDFF4FS3CDA02698	302,315	2012
351	FORD	346 GLAVAL HYB	1FDFF4FS5CDA02704	282,506	2012
352	FORD	346 GLAVAL HYB	1FDFF4FS7CDA02705	373,089	2012
20	FORD/STARCRAFT	020 STARCRAFT	1FDFF4FL0DDB04907	146,020	2013
22	FORD/STARCRAFT	020 STARCRAFT	1FDFF4FL6DDB04913	174,982	2013
23	FORD/STARCRAFT	020 STARCRAFT	1FDFF4FL1DDB04916	127,091	2013
24	FORD/STARCRAFT	020 STARCRAFT	1FDFF4FL5DDB04921	189,377	2013
25	FORD/STARCRAFT	020 STARCRAFT	1FDFF4FL7DDB04922	136,352	2013
362	FORD	360 GLAVAL	1FDFF4FS2DDA41977	346,048	2013
363	FORD	360 GLAVAL	1FDFF4FS4DDA41978	309,554	2013
364	FORD	360 GLAVAL	1FDFF4FS6DDA41979	317,478	2013
365	FORD	360 GLAVAL	1FDFF4FS2DDA41980	348,037	2013
366	FORD	360 GLAVAL	1FDFF4FS4DDA41981	311,982	2013
367	FORD	360 GLAVAL	1FDFF4FS6DDA41982	333,345	2013
368	FORD	360 GLAVAL	1FDFF4FS8DDA41983	346,220	2013
369	FORD	360 GLAVAL	1FDFF4FSXDDA41984	363,542	2013
370	FORD	360 GLAVAL	1FDFF4FS1DDA41985	355,558	2013
371	FORD	360 GLAVAL	1FDFF4FS3DDA41986	313,903	2013
372	FORD	360 GLAVAL	1FDFF4FS5DDA41987	358,532	2013
373	FORD	360 GLAVAL	1FDFF4FS7DDA41988	305,200	2013
374	FORD	360 GLAVAL	1FDFF4FS9DDA41989	344,343	2013
375	FORD	360 GLAVAL	1FDFF4FS5DDA41990	351,604	2013
376	FORD	360 GLAVAL	1FDFF4FS7DDA41991	345,430	2013
377	FORD	360 GLAVAL	1FDFF4FS9DDA41992	339,017	2013
378	FORD	360 GLAVAL	1FDFF4FS0DDA41993	362,933	2013
379	FORD	360 GLAVAL	1FDFF4FS9DDA44665	344,017	2013
380	FORD	360 GLAVAL	1FDFF4FS0DDA44666	333,913	2013
381	FORD	360 GLAVAL	1FDFF4FS2DDA44667	350,085	2013
382	FORD	360 GLAVAL	1FDFF4FS4DDA44668	357,088	2013
383	FORD	360 GLAVAL	1FDFF4FS6DDA44669	369,224	2013
384	FORD	360 GLAVAL	1FDFF4FS2DDA44670	329,011	2013
385	FORD	360 GLAVAL	1FDFF4FS4DDA44671	368,698	2013
387	FORD	360 GLAVAL	1FDFF4FS2DDA28887	332,022	2013
388	FORD	360 GLAVAL	1FDFF4FS3DDA45214	326,993	2013
389	FORD	360 GLAVAL	1FDFF4FSXDDA45212	348,774	2013
391	FORD	391 GLAVAL	1FDFF4FS0EDA13340	356,231	2013.0
392	FORD	391 GLAVAL	1FDFF4FS6EDA13343	358,996	2013.0
393	FORD	391 GLAVAL	1FDFF4FS8EDA13344	363,420	2013.0

Vehicle	Make	Class	VIN Number	Odometer	Year
394	FORD	391 GLAVAL	1FDFE4FSXEDA13345	333,561	2013.0
395	FORD	391 GLAVAL	1FDFE4FS5EDA13348	332,238	2013.0
396	FORD	391 GLAVAL	1FDFE4FS1EDA13332	350,272	2013.0
397	FORD	391 GLAVAL	1FDFE4FS3EDA13333	321,567	2013.0
398	FORD	391 GLAVAL	1FDFE4FS5EDA13334	361,047	2013.0
399	FORD	391 GLAVAL	1FDFE4FS7EDA13335	318,698	2013.0
400	FORD	391 GLAVAL	1FDFE4FS7EDA13349	350,917	2013.0
401	FORD	391 GLAVAL	1FDFE4FS3EDA13350	320,540	2013.0
402	FORD	391 GLAVAL	1FDFE4FS5EDA13351	339,564	2013.0
403	FORD	391 GLAVAL	1FDFE4FS7EDA13352	282,896	2013.0
404	FORD	391 GLAVAL	1FDFE4FS8EDA17104	351,640	2013.0
405	FORD	391 GLAVAL	1FDFE4FSXEDA17105	180,296	2013.0
26	FORD	2018 LFChampion	1FDFE4FS2JDC36103	77,619	2018
27	FORD	2018 LFChampion	1FDFE4FS4JDC36104	78,990	2018
28	FORD	2018 LFChampion	1FDFE4FS6JDC36105	79,093	2018
30	FORD	2018 LFChampion	1FDFE4FSXJDC36107	83,158	2018
31	FORD	2018 LFChampion	1FDFE4FS1JDC36108	94,663	2018
406	Ford E450	2018 Champion	1FDFE4FS1JDC32107	110,205	2018
407	Ford E450	2018 Champion	1FDFE4FSXJDC36091	115,269	2018
408	Ford E450	2018 Champion	1FDFE4FS5JDC34524	112,933	2018
409	Ford E450	2018 Champion	1FDFE4FS3JDC32108	122,636	2018
410	Ford E450	2018 Champion	1FDFE4FS1JDC36092	128,019	2018
411	Ford E450	2018 Champion	1FDFE4FS5JDC32109	80,278	2018
412	Ford E450	2018 Champion	1FDFE4FS7JDC34525	122,540	2018
413	Ford E450	2018 Champion	1FDFE4FS3JDC36093	119,496	2018
414	Ford E450	2018 Champion	1FDFE4FS1JDC32110	111,342	2018
415	Ford E450	2018 Champion	1FDFE4FS5JDC36094	121,809	2018
416	Ford E450	2018 Champion	1FDFE4FS7JDC36095	106,387	2018
417	Ford E450	2018 Champion	1FDFE4FS9JDC36096	118,580	2018
418	Ford E450	2018 Champion	1FDFE4FS0JDC36097	83,154	2018
420	CHAMPION	2019 Champion	1FDFE4FS4KDC61182	50,326	2019
421	CHAMPION	2019 Champion	1FDFE4FS6KDC61183	72,499	2019
422	CHAMPION	2019 Champion	1FDFE4FS8KDC61184	63,097	2019
423	CHAMPION	2019 Champion	1FDFE4FSXKDC61185	60,898	2019
424	CHAMPION	2019 Champion	1FDFE4FS1KDC61186	64,568	2019
425	CHAMPION	2019 Champion	1FDFE4FS3KOC61187	61,830	2019
426	CHAMPION	2019 Champion	1FDFE4FS5KDC61188	69,673	2019
427	CHAMPION	2019 Champion	1FDFE4FS7KDC61189	38,949	2019
428	CHAMPION	2019 Champion	1FDFE4FS3KDC61190	63,124	2019
429	CHAMPION	2019 Champion	1FOFE4FS5KOC61191	70,074	2019
430	CHAMPION	2019 Champion	1FDFE4FS7KDC61192	68,073	2019
431	CHAMPION	2019 Champion	1FDFE4FS9KOC61193	64,400	2019
432	CHAMPION	2019 Champion	1FDFE4FS0KDC61194	64,476	2019
433	CHAMPION	2019 Champion	1FOFE4FS2KDC61195	76,141	2019

Vehicle	Make	Class	VIN Number	Odometer	Year
434	CHAMPION	2019 Champion	1FDFE4FS4KDC61196	66,957	2019
435	CHAMPION	2019 Champion	1FDFE4FS6KDC61197	58,238	2019
436	CHAMPION	2019 Champion	1FDFE4FS8KDC61198	65,527	2019
437	CHAMPION	2019 Champion	1FDFE4FS2KDC74870	60,389	2019
438	CHAMPION	2019 Champion	1FDFE4FS1KDC74875	58,768	2019



Appendix D

EQUIPMENT INVENTORY

Other Assets with an Acquisition Cost Less than \$50,000

Asset Type	Acquisition Date	Acquisition Cost	Description
FARE	11/1/2018	\$229,620	(20) "FAST FARE" BOXES & INSTALLATION
FARE	3/1/2020	\$3,446,827	(262) GENFARE FAST FARE FAREBOXES FOR NEW FARE COLLECTION SYSTEM
FARE	7/1/2020	\$504,821	NEXT GEN FARE SYS - VEHICLE INSTALLATIONS
FARE	7/1/2020	\$338,230	MOBILEVARIO / CCPOS EQUIPMENT FOR NGFS @ CENTRAL
FARE	8/1/2020	\$440,179	FAST FAREBOX SYSTEM ACCEPTANCE & INSTALL
FARE	10/15/2020	\$495,028	FAST FAREBOX CERTIFICATION
FARE	11/12/2020	\$504,821	(8) NGFS CASH/CC TVM'S
FARE	1/1/2021	\$556,118	MOBILITY ON DEMAND FARE TECHNOLOGY
FARE	1/1/2021	\$165,120	TRIP BROKER DISPATCH PROGRAM
FARE	5/13/2021	\$3,143,229	NEXT GEN FARE SYSTEM FINAL DESIGN ACCEPTANCE
LAND	9/26/1991	\$458,973	LAND-130 NESTOR ST
LAND	6/14/1996	\$181,635	1.11 ACRE LOT @ 4016 ANDREW JACKSON PKWY, HERMITAGE 37076
LAND	9/29/2006	\$7,329,924	FUTURE SITE OF MUSIC CITY CENTRAL TRANSIT STATION
LAND	10/1/2006	\$4,600,000	DONATED PROPERTY FOR MUSIC CITY CENTRAL
LAND	12/15/2010	\$2,060,000	LAND LOCATED 430 MYATT DRIVE
LAND	1/15/2011	\$102,492	TRACT OF LAND NET TO NESTOR PROPERTY ON DRIFTWOOD
MISC	8/22/2014	\$301,811	BUS TRAINING SIMULATOR
MISC	8/30/2014	\$311,537	(55) CAMERAS & RECORDING EQUIP FOR ON-BOARD BUS SURVEILLANCE
MISC	6/30/2015	\$140,000	(4) MCC1700 DISPATCH CONSOLES @ NESTOR
MISC	6/30/2015	\$58,523	180 WINCAL DOME CAMERAS FOR BUSES
MISC	10/1/2015	\$814,732	RIVERFRONT BUS CHARGING STATION & OVERSIGHT
MISC	1/1/2016	\$59,860	LEIBERT COOLING SYSTEM FOR MYATT SERVER RM
MISC	1/1/2016	\$168,400	FARE MEDIA POINT OF SALE (PHASE 1)
MISC	2/1/2016	\$6,824,140	CAD/AVL EQUIPMENT & SERVICES
MISC	2/11/2016	\$50,888	SHOP CHARGER FOR ELECTRIC BUSES
MISC	3/16/2017	\$52,817	MOTOROLA 7100 DISPATCH CONSOLE FOR ACCESSRIDE OFFICE
MISC	9/1/2017	\$743,070	ROSA PARKS CHARGING STATION EQUIPMENT & INSTALLATION
MISC	9/1/2017	\$1,643,165	ROSA PARKS CHARGING STATION LOT IMPROVEMENTS
MISC	6/1/2018	\$536,296	CAD/AVL EQUIPMENT & SERVICES
MISC	11/8/2018	\$103,246	(75) 829 INDUSTRIAL ISR ROUTERS & (75) COMPATIBLE IR800 MODULES
MISC	3/6/2019	\$104,363	(50) 829 INDUSTRIAL ISR ROUTERS & COMPATIBLE MODULES
MISC	4/18/2019	\$135,479	(153) MERAKI MR20 PANORAMA CAMERAS W/CLOUD MANAGER & LICENSES
MISC	4/18/2019	\$223,852	(102) 829 INDUSTRIAL ISR ROUTERS & COMPATIBLE MODULES
MISC	5/16/2019	\$109,676	(51) 829 INDUSTRIAL ISR ROUTERS & COMPATIBLE MODULES
MISC	6/1/2019	\$465,284	TRANSIT ASSET MGMT PLAN (4YR PLAN)
MISC	8/22/2019	\$87,600	(24) CAMERA & DVR EQUIPMENT & INSTALLATION ON BUSES
MISC	8/29/2019	\$75,882	(19) CAMERA & DVR EQUIPMENT & INSTALLATION ON BUSES
MISC	8/29/2019	\$120,542	(33) CAMERA & DVR EQUIPMENT & INSTALLATION ON BUSES
MISC	8/29/2019	\$174,772	(50) CAMERA & DVR EQUIPMENT & INSTALLATION ON BUSES
MISC	8/29/2019	\$110,972	(30) CAMERA & DVR EQUIPMENT & INSTALLATION ON BUSES
MISC	8/29/2019	\$123,732	(34) CAMERA & DVR EQUIPMENT & INSTALLATION ON BUSES

Asset Type	Acquisition Date	Acquisition Cost	Description
MISC	11/7/2019	\$158,000	NETMAN GARAGE DATA MGMT SYSTEM (w/2 LICENSES)
MISC	8/6/2020	\$97,229	(40) APX4000 PORTABLE RADIOS W/ CHARGERS
MISC	8/19/2020	\$52,080	(125) ACRYLIC DRIVER BARRIERS FOR BUSES
MISC	8/20/2020	\$58,500	BUS OPS ANALYSIS SFTWR LICENSE (EXP 10.19.21)
MISC	10/22/2020	\$87,993	CISCO PHONE SYSTEM: SETUP/CONSULTING/INSTALL/TRAINING
MISC	10/22/2020	\$53,096	CISCO PHONE SYSTEM: LICENSES (CCX 11.0)
MISC	12/11/2020	\$51,678	(144) CISCO IP PHONES MODEL 8841
MISC	1/1/2021	\$610,115	COMPREHENSIVE BUS OPS ANALYSIS
MISC	6/5/2021	\$10,551,998	TRANSIT SIGNAL PRIORITY PHYSICAL ASSETS
MISC	6/5/2021	\$2,154,610	TRANSIT SIGNAL PRIORITY TECHNOLOGICAL ASSETS
NET	6/14/2004	\$56,782	TRAPEZE SCHEDULING & DISPATCHING SOFTWARE
NET	8/15/2004	\$102,767	TRAPEZE SCHEDUL'G & DISPATCH'G SFTWR - phase 1
NET	5/30/2005	\$97,225	TRAPEZE SCHEDULING & DISPATCHING SOFTWARE
NET	8/19/2005	\$326,435	TRAPEZE FX (software, install, training)
NET	10/31/2006	\$61,505	TRAPEZE SCHEDULING SOFTWARE
NET	6/30/2007	\$108,811	TRAPEZE SOFTWARE/TRAINING & MAINTENANCE
NET	2/1/2012	\$149,250	MIP5000 CONSOLE EQUIPMENT FOR CA/AVL DISPATCHING
NET	5/17/2018	\$67,822	UPS BACKUP GENERATOR INSTALLATION
NET	6/30/2018	\$291,591	VMWARE VSPHERE ENTERPRIS PLUS W/ VXRAIL HRDWR & SUPPORT
NET	6/30/2018	\$59,000	DRIVER ASSESSMENT SFTWR WITH CAMERAS FOR TRAINING DEPT
NET	11/1/2018	\$151,322	VIEWPOINT ANALYTICS SOFTWARE
NET	4/3/2019	\$53,287	(2) VMWARE VSPHERE VXRAIL 500
NET	7/15/2019	\$222,604	R640 POWEREDGE SERVER W/ VMWARE VSPHERE 6 SOFTWARE & PROSUPPORT/PRODEPLOY PLUS FOR FARE TECH
NET	8/22/2019	\$164,400	SHAREPLEX FOR ORACLE (3) LICENSES
NET	6/30/2020	\$105,575	TRANSITMASTER MDT SINGLE POINT LOG-ON for FARE COLLECTIONS SYS
NET	10/29/2020	\$50,588	TRAPEZE IVR SOFTWARE MITIGATION
SHOP	6/30/2002	\$74,949	3 SETS FO 6 HYDRAULIC LIFTS
SHOP	6/30/2011	\$58,330	STAR TRANSFERMATIC DOUBLE SPINDLE BRAKE DRUM LATHE (MODEL 53-DS)
SHOP	9/1/2011	\$50,392	LPG 5000 LB FORKLIFT/TOWMOTOR (8F- G -U25)
SHOP	6/1/2013	\$128,250	KONI COLUMNS LIFT SYSTEM
SHOP	9/11/2014	\$89,670	GENTEX SCAFFOLDNG FOR ELECTRIC BUSES
SHOP	1/1/2016	\$102,085	JLG 600S FORKLIFT @ NESTOR
SHOP	5/4/2016	\$590,984	(17) SETS OF 4, 40' BUS LIFTS w/CONTROL BOXES
SHOP	1/4/2017	\$53,064	ADVANCE (model #7765; serial #1000063455) RIDE SWEEPER - MYATT SHOP
SHOP	5/17/2018	\$84,674	BUS WASH PARTS REPLACEMENTS
SHOP	11/25/2020	\$137,250	(3) GENTEX BUS TOP 24 TWO-SIDED BUS SCAFFOLDING W/FALL PROTECTION



Appendix E

ASSET HIERARCHY

Asset Hierarchy Used in the TERM Rating System

Substructure	Fire Protection	Shell Appurtenances
Foundations Walls Columns Pilings Exposed Foundation Elements Basement Insulation Slab	Sprinklers Standpipes Fire Extinguishers Hydrants and other fire protection specialties Fire Detection System Fire Suppression Systems	Stairs Walkways/Sidewalk Fire Escapes Means of Egress Vertical Openings Cat Walk Inspection Pit
Shell and Stationary Equipment	Interiors	Facility Equipment
Superstructure Structural Frame: columns, pillars, walls Fire Resistive Construction Integrity Roof Roof Structural Systems Deck Waterproofing Roof Penetration Flashing Systems Gutters Chimney, Skylights, Eaves Surroundings Roof Drainage Systems Inspection Features Roof Hatches Roof Ladders Exterior Building Envelope - Masonry/Concrete Walls Building Envelope – Cladding Building Envelope - Windows and Glazing Building Envelope - Doors, Glazing, Door Hardware Building Envelope - Garage Doors Bird Proofing System Exterior Finishes	Partitions Interior Walls Interior Windows and Glazing Interior Doors, Glazing, Door Hardware Stairs Seating Finishes Flooring System Flooring Spaces Ceiling System Wall Finishes Fittings Interior Amenities Signage Built-In Furnishings Appliances Adequate Office Space Break Area Provided Male/Female Lockers and Showers ADA Compliance	Service Vehicles Fork Lifts Loaders Scissor Lifts Boom Lifts Man Lifts Snowplow

Platforms	Plumbing	Site
Structure Slab Joints Railing Bridge Plate Base Substructure Under-Platform Fence Track Access Steps Platform Drain Utility Pole Communication Device Signage Seating Recycling / Trash Canopy Roof (gutters and leaders) Frame Water Proofing Bird Proofing System Lighting Shelter Ramp Stairs	Domestic Water Distribution Water Heaters Water Treatment Systems Backflow Prevention Sanitary System Pumps (sump, well, domestic) Bathroom Fixtures Other Plumbing Items (Piping, Insulation, etc.) Other Plumbing Fixtures	Roads Parking Lots Curbs Access Road Parking Lots Sidewalk Walkway Pavement Marking Security Fences Gates Barrier Arm Site Security Lighting Camera/Surveillance System Guard Shack
Utilities	Fare Collection Equipment	
Water Back Flow Preventer Murdock Metering Cabinets Exterior Fire Protection Landscape Irrigation System	Turnstiles Ticket Machines Other fare collection items	

Heating Ventilation & Air Conditioning	Electrical & Communications	Conveyance
Energy Recovery Units Heat Pumps Heat & Ventilation Units Make-Up Units Air Handling Unit Boilers Burners Furnaces Unit Heaters Radiant Heaters Finned Tube Radiation and Convertors Air Conditioning Unit Splits and Mini-Splits Cooling Towers Condensers (Air-Cooled, Evaporative) Chillers HVAC Air Terminals Fans (Centrifugal, Axial, Roof-Mounted, Propeller) Coils Heat Exchangers Reciprocating Compressors Air Curtains Water Treatment System Pumps Other HVAC Components	Electrical Service/Distribution Power Distribution/Switchgear Service Panel Generator and Transfer Switch Transformer(s) (non-utility owned only) Disconnect Switch DC Power Substation/Traction Power Substation AC Power Substation Backup Power Uninterruptible Power Supply (UPS) Lighting Automatic Transfer Switch Interior Lighting Exterior Lighting (Building and Site) Communications (Data) System Phone System Emergency Lighting/Exit Signs Other Electrical Components (Conduits, etc.)	Elevators Brakes Car Door Equipment Hydraulic System Cable System Jack Assembly Motor Car Sling/Platform Controller/Power Supply Pits Safety Equipment / Signage Fire Service Elevator Recall Escalators Brakes Carriage Step and Guide Assemblies (Comb Plate, etc.) Handrails Drive Train & Motor Controller/Power Supply Safety Equipment Lifts Cranes and Monorails Vehicle Lifts Hoists Davits